Accounting in Media and Information Firms

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13.1 Accounting and Media Accounting

This chapter deals with accounting in the media and digital sector. In this book, we covered so far:

1. How firms create their products;
2. How firms harvest their products.

We will now deal with:

3. The feedback loop: how firms identify performance and plan for the future.

The present chapter is about such feedback through accounting and financial information in the media and digital sector. The reader will learn in this chapter about:

- An overview of media accounting issues;
- A recognition of the problems and pitfalls for managers;
- A recognition of how to analyze the financial condition of media and tech firms.

We will discuss:

- How companies gather and report financial information to partners, investors, regulators, and tax authorities;
- The special accounting and reporting issues for media and digital companies;
- How investors and partners analyze finance reports;
- How companies use accounting information to run their business and allocate resources;
- The impact of new IT technology on accounting information and on management control over operations.

13.1.1 The Function of Accounting in Business

13.1.1.1 Accounting as Science Versus Accounting as Persuasion

Accounting is the arrangement of quantitative information about an organization's operations and financial state. It has a long history. Counting and numbers emerged early as a human endeavor parallel to writing and letters. Writing skills developed into the professions of scribes, writers, and intellectuals. Counting skills gave rise to mathematicians, scientists, and accountants. Humans *count* heads of cattle, bushels, and barrels. They *account* for their activities in lists and ledgers. And they do *accounting* through tabulations, balances, and summaries.

Accounting has a dual nature, that of objective *science* and that of subjective *persuasion*. These two aspects of accounting differ in their goals and they pull accounting professionals in two different directions. On the one hand, the role of accounting is to illuminate and analyze the activities of an enterprise (or even country), which is the scientific dimension. Correspondingly, modern accounting has been an early user of highly advanced information processing technologies. On the other hand, the persuasive aspect of accounting aims to convince others about—the health of an enterprise.

Managers and owners need accurate and timely information on the economic condition and performance of the firm to help guide their decisions. Accounting as a science provides reasonably well-defined guidelines and processes that provide for generating such information.

Investors use accounting information to make their decisions, and it is therefore in the interest of firms to use accounting reports to make themselves look good. For managers, positive accounting information ensures continued support by owners and top management. Conversely, in a setting where profit-sharing is tied to financial results, accounting practices can be used to lower the reported profit and hence lead to lower payments to profit sharing investors, collaborators, and partners. Skillful accounting can also lawfully reduce tax payments. Properly presented, a firm can gain favorable government treatment due to its reported performance, whether stellar or dismal. All this is possible because, despite the rules-oriented characteristics of accounting, major decisions within the accounting process are often far from clear-cut.

This tension over proper accounting is part of a struggle over the control of information among the key players: investors, managers, and the government. Company insiders have a vast informational asymmetry in their favor. They will try to part with as little negative (or, occasionally, positive) information as possible. Only law and competitive pressure forces them to disclose more about the firm than they would otherwise do. Accounting as a profession is caught in the middle of this struggle.

As accounting grew to serve many functions, it also became more complex. And now, this very formal structure is being applied to the digital sector. On the one hand we have more technology to do the numbers faster and better than ever. But we also have a dynamic entrepreneurial business culture which brings its business and technology creativity into a profession that has been staid almost by design. This is a never-ending tension. It is, in a way, the underlying theme of this chapter.

13.1.1.2 History of Accounting

The accounting process bears the image of tedious bookkeeping. Its structural elegance is often obscured, and people imagine it as confining, narrow, and lacking in imagination. Often, the cultures of "creatives" and "entrepreneurs" clashes with a derided culture of "bean-counters." Yet this perspective on accounting is highly superficial.

Accounting is one of humanity's great intellectual constructs. The process summarizes human activities by numbers, follows transaction flows, and provides snapshots of reality. This enables an analysis, control, and oversight of organizations and governments. Accounting creates a unified measuring system that allows for the integration of millions of actions by thousands of people in dozens of countries.

13

Based on techniques going back 500 years, accounting has evolved into a well-established profession complete with standards, self-governance, and research. The earliest and most rudimentary forms of keeping track of transactions appeared in Sumeria and Egypt in 2000 BC. As the methods continued to develop, helpful tools like the Chinese abacus were invented. A major step forward came in Renaissance Italy with the monk Luca Pacioli (1447–1517) setting forth the principles of "double entry" bookkeeping in his work *Summe de Arithmetica, Geometrica, Propotioni et Proportionalite* (1494). He pioneered the concepts of "debits" and "credits" that would "balance." Pacioli is considered to be the father of accounting. Three centuries later, Josiah Wedgewood (1730–1795), the grandfather of Charles Darwin and an early industrialist, introduced techniques for recording managerial transactions by developing what became cost accounting. Wedgewood determined the cost of materials and labor for each of his famous pottery products and recorded their value. This provided a tool for production planning and for pricing.

By the late eighteenth century, accounting practices became more standardized, with professional "accomptants" being used by many businesses in London. In 1849 and 1854, the major accounting firms of Samuel Price and William Cooper got started. Today it is the "P" and the "C" in the "Big 4" accounting firm PwC.[1] After 1862, the auditing of companies by independent "public accountants" became mandated in Britain, allowing for a rise in the status of accountants. In Japan, Western-style accounting was introduced in 1873 by Yukichi Fukuzawa.

Modern managerial accounting was born in 1923 as General Motors President Alfred Sloan introduced major cost accounting techniques, made as calculations of the return on investments and on equity, and flexible budgeting.

Thus, accounting has been around for a long time. So what makes it so interesting today? As mentioned, the rapid change in the technology of collection and processing of information; the rapid change in companies' business models; and the rising importance of globalization, start-ups, project-based organizational structure, intellectual assets, and institutional investors.

13.1.1.3 A Company's Accounting Function: General

The role of an accountant takes on various forms depending on company size, ownership, structure, and industry.

■ Stage 1 Firm: Small Proprietorships

In small entrepreneurial firms, the owner/manager of the firm typically starts out by keeping his or her own financial records and books. Such firms typically retain an independent professional accountant such as a certified (or chartered) public accountant (CPA), also known as a public accountant (PA) in some countries, for the preparation of quarterly or annual financial statements and tax returns.

1 PricewaterhouseCoopers. "History and Milestones." Last accessed July 6, 2017. ► http://www.pwc.com/us/en/about-us/pwc-corporate-history.html.

Stage 2 Firms: Around 20–30 Employees

As the start-up business grows, the volume of transactions rises and with it the number of bills and invoices. The owner's time becomes too valuable and the company hires its own bookkeeper. For labor-intensive tasks such as inventory and HR/payroll, the company might need outside help. The firm still requires the work of an outside CPA to prepare monthly or quarterly reports, but the involvement of such a costly professional will usually be limited to about a dozen days a year. In other cases, an intensive project such as a film production may have an accountant assigned to deal with its financial transactions.[2]

Stage 3 Firms: Around 100 Employees

As a firm becomes mid-sized, it will employ an internal accountant or controller. The internal controller reports back to top management and, where required, to lending banks. He or she is responsible for overseeing accounts payable, accounts receivable, special ledger accounts, and internal cost calculation. Outside accountants may also be used at the request of banks and investors. These accountants compile, review, and audit the transactions recorded by the internal controller throughout the year. They might typically spend two or three weeks a year with a firm.

Stage 4 Firms: Large Companies

A large company retains an outside independent CPA firm to perform audits for investors and management. Special projects will also require the services of a CPA. Large companies spend tens of millions of dollars on their annual CPA bill.

Typically, the chief accounting officer or controller oversees the internal accounting process within a company, reporting to the CFO.

The role of an internal accountant in this setting is to prepare and interpret data needed by management, monitor business processes for compliance with the budget, and design systems to prepare payrolls, record purchases and sales, keep track of assets, and so on. The accounting department tracks the flow of money inside the company. The tasks are often divided internally between accounts receivable/payable, payroll, credit department, and tax department. Some tasks may be outsourced to an outside financial service provider.[3]

13.1.2 Is Accounting for Media and Technology Special?

The basics of accounting in media and technology are the same as in other industries but they must often deal with unusual circumstances:

- Many of the assets of media and media tech firms are intangibles. These include copyrights, patents, and licenses. How does one account for such items of value?
- For Internet start-up companies, asset valuation is difficult due to low or absent cash flow. They are also heavy users of stock options. And they are eager to project a positive picture to potential investors.
- The pervasive role of the government in the media sector often governs rules on how to state a firm's financial performance.
- In e-commerce, firms engage in highly globalized transactions, often in real time, and subject to numerous tax systems.
- In the film industries there is much profit and revenue sharing.
- In the TV and radio industries there is a heavy use of non-cash barter deals.
- For book publishing, music recordings, and patent licensing, compensation takes the form of royalties often based on revenues.
- For tech start-ups, there is often an exchange of equity for services.
- Accounting itself is an information industry, and increasingly a high tech one.

2 Such accountants prepare schedules and budgets for film productions, as well as managing the day-to-day accounting functions, and report the project's financial progress against the budgets. Usually, production accountants will have a thorough knowledge of union contracts, taxes, and relevant government regulations. These accountants usually work for a film production on a freelance basis or as part of a specialized firm.

3 Berton, Lee and Roy Harris. "Reel-World Accounting." *CFO* 15, no. 3 (March 1999): 34–40.

13.1.3 Case Discussion

Disney's Accounting—Mickey Mouse or Cinderella?

The Walt Disney Company is the world's second largest media company.[4] Its Walt Disney Studios division produces films through Walt Disney Pictures, Touchstone, Hollywood Pictures, Pixar, Lucasfilm, Marvel, and for a time Miramax. Its film distribution arm is Buena Vista. Disney's other divisions include the TV networks ABC, and the Cable channel families ESPN (80% ownership) and A&E (50% ownership). In 2018 Disney announced a deal to buy major parts of 21st Century Fox, including its film and TV studio, TV and several cable networks. Disney also owns and/or operates theme parks in several countries (Disneyworld); it also runs or co-owns online operations (Hulu), theaters, and retail stores. It controls subscription streaming platform Bamtech as the foundation for its online sports and entertainment future.

During 2003 and 2004, CEO Michael Eisner was harshly criticized by some shareholders and directors for the company's business performance. (This was also discussed in ► Chap. 5 Human Resource Management for Media and Information Firms.) At the 2004 annual meeting, 43% of shareholders,[5] including major institutional investors, voted against management. This is highly unusual in corporate America, especially since under CEO Eisner the share price of Disney had risen enormously. One share bought in 1984 for $52 would have been worth $1334 at the end of 2004, a rise by a factor 25.4 in 20 years. And the financial reports for 2004 were good, suggesting a further rise. This invites us to take a close look at Disney's accounts at the time. Were Disney's financial reports painting a rosy picture to take some pressure off management? Or were the critics wrong? We will return to this question throughout this chapter.

13.1.4 The Five Sets of Books

There are different purposes for accounting. Since each calls for different treatment, they create different accounting summaries, and they do so in a perfectly legal manner. These different "sets of books" are those of:

- Financial accounting;
- Managerial accounting;
- Tax accounting;
- Regulatory accounting;
- Profit accounting.

Financial accounting provides information to decision makers outside of a company but interested in its performance—shareholders, bankers, financial analysts, investors, labor unions, journalists, and so on. The product of financial accounting is a set of financial statements which are often publicly disclosed. These documents are crucial to the relationship between a company's owners and managers.

Securities laws try to ensure that people managing the business do not defraud investors by providing them with false or misleading information, or by failing to disclose information that a reasonably prudent investor would want to know.[6]

The process tries to assure investors of the accuracy of financial reports. To assure compliance with "generally accepted" accounting rules, firms have their public financial statements examined by independent "chartered" or "certified" accountants.[7]

In contrast, *managerial accounting* is addressed to the internal management of the firm. It measures, analyzes, interprets, and communicates financial information internally.[8] In particular, it helps measure the cost of products, the profitability of divisions, and budget allocations. Because these reports are for internal rather than public use, they need not follow any particular set of official rules.

Tax accounting is the process for calculating an organization's tax liability, following methodologies regulated by tax authorities. The purpose is to follow governmental rules while minimizing tax liability. These documents, too, are not public.

Regulatory accounting rules are established by government agencies for a regulated industry

4 O'Reilly, Lara. "The 30 Biggest Media Companies in the World." *Business Insider*. May 31, 2016. Last accessed July 6, 2017. ► http://www.businessinsider.com/the-30-biggest-media-owners-in-the-world-2016-5/#27-gannett--295-billion-in-media-revenue-4.

5 Teather, David. "Disney shareholders force Eisner out of chairman's role". March 4, 2004. Last accessed July 6, 2017. ► https://www.theguardian.com/business/2004/mar/04/usnews.citynews.

6 Litwak, Mark. "Financing independent films." *Mark Litwak*. June 2005. Last accessed July 6, 2017. ► http://www.marklitwak.com/uploads/2/2/1/9/22193936/financing_independent_films.pdf.

7 Stickney, Clyde and Roman Weil. *Financial Accounting: An Introduction to Concepts, Methods, and Uses.* New York: Dryden Press, 2000, 411–450.

8 Gillet, Phillip W. "Managerial Accounting Fundamentals Website." *San Diego State University*. Fall 2000. Last accessed July 29, 2011. ► http://acct202.tripod.com/.

or activity. For example, in America the Federal Communications Commission, or in India the Telecom Regulatory Authority, established financial reporting requirements and formats for the telecom industry. This process provides information to governments for measuring compliance with regulations and enables the setting of regulated prices.

Profit accounting is utilized for allocating profits. An example is the distribution of profits from a film or a music project. This type of accounting will be discussed first.

13.2 Profit Accounting

The following analysis focuses on profit accounting in film. But the issues are similar for all business activities where a share of profits must be paid to outsiders, such as a limited partnership in a tech venture, or where patent license fees are based on a profit share.

13.2.1 How to Depress Accounting Profits

Typically, the entity that must pay out has incentives to show profits that are low. David O. Selznick the independent producer of the legendary film *Gone with the Wind* complained that Hollywood was "built on phony accounting." Is profit accounting Hollywood's most creative art? Part of the issue is that the studio companies have an economic incentive to understate profits which they must share. To depress profits, the distributor's accountants will allocate high costs to overhead expenses, set a high percentage for the depreciation and amortization of assets, charge high internal transfer prices for inputs and low ones for outputs, and put high price tags on marketing expenses. Other methods of depressing accounting profits are the exclusion of certain revenue streams (in film, for example, only part of home video sales are counted).

Thus, profits can be described and defined in several and very different ways. As a result, contracts with investors and others with a stake in the profits need to specify carefully how profits will be determined by the distributor or by a general partner in a limited partnership.[9] If any participants disagree with such profit allocations, their options, unless specified in the contract, are limited when they lack the relevant information. The two basic types of profit participation deals are "gross" and "net" participation. Participants with bargaining power, such as major film stars and other top talent, will demand a percentage of the project's *gross* profit, because of the many potential disputes over deductions of cost and expense items from gross profits to reach net profits. The most desirable (and rarest) variation is called the "dollar one," where participants are entitled to a share of all the revenue received by the studio distributor (or limited partnership) before any deduction except those mandated by law.[10] A character in David Mamet's play *Speed-the-Plow* sums up his learning about Hollywood financials in one sentence: "There is no net."[11] But keep in mind that most participants, whether producers, directors, or actors, are experienced in the film business, are advised and represented by seasoned agents and lawyers, all of whom understand these accounting practices and take them into consideration. Ultimately, their share in the project's profit is a reflection of their relative bargaining strength and the essentiality of their contribution to the studio/distributor, not of underhanded accounting.

13.2.2 Royalties for Books and Music

For books, the royalty calculation to the author is based on the cover price: if the cover price of a hardcover book is $20 and the royalty rate is 10% of the cover price, the royalty is $2 per book. An

9 Vogel, Harold L. "Movie Industry Accounting." In *A Concise Handbook of Media Industry Economics.* Ed. Charles Moul. New York: Cambridge University Press, 2005.

10 Epstein, Edward Jay. *The Big Picture, The New Logic of Money and Power in Hollywood.* New York: E.J.E. Publications, Ltd., Inc., 2005. On top of that, payments to all gross participants are considered a deferred "production cost" and are retroactively added to the budget of the film. The $30 million payouts to Hanks and Spielberg therefore added $60 million to the film's budget, and it therefore raised the studio's overheads and other charges that were calculated as a percentage of the budget, by another $15 million. Taken together, all other profit participants needed the film to make an extra $75 million to get to the "break-even" point where their own profit participation started.

11 Epstein, Edward Jay. *The Big Picture, The New Logic of Money and Power in Hollywood.* New York: E.J.E. Publications, Ltd., Inc., 2005. A variation of gross profit participation is for stars or investors to receive a share of the film's revenues, after the film earns a specified amount, such as break-even.

alternative system is based on revenues received.[12] If the book gets discounted by, say 50%, the royalty is now 10% of $10, not of $20, and the author's take is $1 per book.[13] Publishers issue a periodic royalty statement and check. Publishing contracts typically contain a clause entitling authors to inspect and audit the relevant records, but often only within two years.

Similar issues of defining profits exist in the music industry. Is it true, as often stated, that 80% of records do not make any money? This depends on the method of accounting and cost allocation, usually specified by the contract. Accounting issues within the recording industry include "recoupment," royalty, audits, and contract structure.[14] Many of the major costs of a recording are "recouped," that is subtracted from the artist's royalties against prior payments known as "advances." An artist is responsible for part of the recording costs, equipment, and personnel, the costs of live performances, and at least half of the promotional costs such as music videos. Royalties are only paid out after the advances have been covered. But the label assumes the risk if the recording does not generate enough revenues for deduction.

■ Example: The Economics of a Gold Record

A "gold record" means that 500,000 copies were sold in the USA (20,000 in China, 50,000 in France; 100,000 in the UK, Germany, India, and Japan). It is a mark of success. One would therefore assume that a gold record is a financial bonanza for the artist. But the reality can easily be different.

Suppose that a band signs a contract that stipulates a royalty rate of 14%, and the CD sells 500,000 copies at $14 each, for a total of $7,000,000. One would therefore expect the band to receive $980,000. But this does not account for the many deductions. For example, the CD royalty rate applies only to 85% of the CDs. The band recorded the album on a $300,000 budget; the producer receives a standard 3% of the royalty, and there may be contractual discounts for promotions and even for breakage (even though CDs do not break like vinyl or shellac once did).[15]

Nominal royalty = 500,000 × $14 CD retail price × 14% royalty rate	$980,000
Real royalty (a) Less 15% free goods (copies given away to radio stations and reviewers and for quantity and sales discounts) (b) Less CD-rate discount 15% (c) Less breakage allowance 10% (d) Less packaging discount 20% (e) Share of royalties to producer = 3% Together, these deductions add up to 60%. Total royalties before deductions: 500,000 × 40% × remainder × 11%	$308,000
(f) Less payments to agent and manager 10%	(-$30,800)
(g) Less recording costs	(-$300,000)
(h) Less 50% of independent promotion	(-$100,000)
(i) Less 50% of video costs	(-$75,000)
(j) Less tour support	(-$50,000)
(k) **Total**	(-$247,800)

Thus, under this example, the band would actually end up owing $247,800 which would have to be covered from subsequent sales and future recordings.

13.2.3 Profit Accounting in Limited Partnerships

In limited partnerships, the share of the general partner (GP) depends on investment contributions, required management effort, and so on. The share of the limited partners (LPs) depends on the size of their investment and other considerations that established by contract. In limited partnerships (LLPs) of hedge funds the GP typically takes

12 Ellenberg, Ethan. "All About Royalties." *The Ethan Ellenberg Literacy Agency*. July 1999. Last accessed July 6, 2017. ► http://ethanellenberg.com/all-about-royalties/.

13 There is a "reserve for returns": books are fully returnable and publishers therefore keep a permanent accounting reserve as a percentage of gross shipments.

14 Holzman, Keith. "Manage for Success: Royalty Accounting." *Holzman Solutions*. August 2002. Last accessed July 6, 2017. ► http://www.holzmansolutions.com/articles/16-aug02.html; Gunderson, Edna. "Bye, bye, a piece of the pie." *USA Today*. June 11, 2004. Last accessed July 6, 2017. ► http://www.usatoday.com/life/music/news/2004-05-16-royalties-main_x.htm; Passman, Donald S. *All You Need to Know About the Music Business*. New York: Simon & Schuster, 2000.

15 Passman, Donald S. *All You Need to Know About the Music Business*. New York: Simon & Schuster, 2000.

2% of fund assets per year, plus 20% of profits, often limited to those above a hurdle rate such as an 8% return.

General partners often have incentives to minimize profits they must share. They can do so by:

- Increasing salaries of managers, including that of the GP;
- Setting high bonuses for managers and classifying them as expenses rather than as part of profit;
- Deducting expenditures such as travel, dinners, meetings;
- Creating reserves for future contingencies;
- Allocating general overheads against fund profits;
- Setting high transfer prices for intra-company transactions of purchases, and low ones for sales;
- Using high rates of depreciation and amortization.

13.2.4 How Profit Participants Can Protect Themselves

Companies' accounting practices are often non-transparent when it comes to royalties and profit shares.[16] Contracts often prevented the auditing of ledgers and accounts to determine accurately the amount of royalties or payments owed.[17] In 2003, BMG, Universal, and Warner Music announced reforms in their accounting practices. BMG took the lead by eliminating packaging and promotional deductions and calculating royalties based on wholesale price rather than discounted retail price.[18] It adopted what it described as a "fairer and more transparent" royalty system that shrank a standard contract from 100 pages to 12 pages.[19] Universal Music Group agreed to give auditors access to previously denied financial records.

In order to raise confidence and hence facilitate transactions, investors—whether in content production or technology ventures—need to protect themselves by some of the following measures:

1. Require a collection account manager: an independent third party who is protecting the interests of investors;
2. Due diligence: check on the producer/general partner/entrepreneur to determine their track record;[20]
3. Understand the parameters of the deal: whether it compensates for inflation, and so on;
4. Obtain all promises in writing and in contracts;
5. Establish on arbitration clause, with the prevailing party entitled to reimbursement of legal fees and costs;
6. Participate actively and seek information through site visits, progress reports, briefings, feedback;
7. Participate in the monitoring of the project, e.g. make sure that the funds are spent on the agreed upon project rather than new ones, unless agreed upon;
8. Obtain an experienced advisor where they lack the expertise, time, or local presence;
9. Make sure that the contract is clear on all the terms, such as the definitions of "net profit" and of "receipts";[21]
10. The amount and types of overhead charged to the project should be clearly spelled out;
11. Insist on reasonable controls and limitations on claims for expenses;[22]
12. Understand that the profit participation reports are prepared on a cash basis for revenue and on an accrual basis for expenses;
13. Define the dates and frequency of financial reporting;
14. Include the right to audit;
15. Require errors and omissions insurance: this helps ensure completion;
16. Require recoupment of net profits to be scheduled prior to financial contributions to certain other payees.

16 Wasserman, Jim. "Calif., N.Y. Weight Regulation: Recording Industry in for New Fight." *Associated Press*. April 4, 2003. Last accessed June 17, 2017. ► https://www.newspapers.com/newspage/221055721/.

17 Future of Music Coalition. "California State Assembly Hearing on Major Label Accounting Practices." Last accessed June 17, 2017. ► https://futureofmusic.org/filing/california-state-assembly-hearing-major-label-accounting-practices.

18 Holloway, Lynette. "BMG Plans to Simplify Royalty Deductions." *New York Times*. November 21, 2002. Last accessed July 6, 2017. ► http://www.nytimes.com/2002/11/21/business/bmg-plans-to-simplify-royalty-deductions.html.

19 Holzman, Keith. "Manage for Success: Royalty Accounting." *Holzman Solutions*. August 2002. Last accessed July 6, 2017. ► http://www.holzmansolutions.com/articles/16-aug02.html; Gunderson, Edna. "Bye, bye, a piece of the pie." *USA Today*. June 11, 2004. Last accessed July 6, 2017. ► http://www.usatoday.com/life/music/news/2004-05-16-royalties-main_x.htm.

20 Alberstat, Philip. *The Insider's Guide to Film Finance*. Waltham, MA: Focal Press, 2004.

21 Shindler, Marty. "Understand before you sign." *The Shindler Perspective, Inc.* Last accessed July 6, 2017. ► http://www.ishindler.com/articles/TSPUnderstandBeforeYouSign.htm.

22 Jones, Cones. *The Feature Film Distribution Deal: A Critical Analysis of the Single Most Important Film Industry Agreement*. Carbondale, IL: Southern Illinois University Press, 2006.

13.3 Public Financial Accounting

13.3.1 Major Financial Documents for Investors

Financial accounting is used to prepare financial information for stockholders, banks, suppliers, and regulators. All publicly traded companies are required to publish financial statements and must follow general procedures known as Generally Accepted Accounting Principles (GAAP)[23] in the USA, or similar national principles in many other countries, or global principles known as International Financial Reporting Standards (IFRS).

13.3.1.1 Balance Sheet

The first major document of financial accounting is the balance sheet. The balance sheet reports a company's assets, liabilities, and stockholder's equity. The value of a company's assets, by definition, balance with the sum of the liabilities and the equity. Assets are typically reported in terms of net book value—the original cost of the asset minus the depreciation on the asset.

13.3.1.2 Income Statement

The income statement, also known as the P&L (profit & loss) statement, presents the operating activities of a firm. Expenses are subtracted from revenues, revealing how much money a company made (or lost) within an accounting period.

13.3.1.3 Cash Flow Statement

The statement of cash flows can be thought of as a business's checking account. It is a company's summary of cash transactions during an accounting period. The statement shows where money comes from, how it is spent, and how much is at hand. These transactions are divided into three categories—operating, financing, and investing—which enables investors to see better how money flows in and out of the company.

13.3.1.4 Pro Forma Financial Statements

Companies often report also with separate financial statements called "pro-formas." These have no defined meaning and formal requirements.[24]

The pro forma statement, being without clear rules, can be based on estimates and projections.

We will discuss all four types of public financial accounting statements, starting with pro formas.

The basic idea behind pro-formas is that a firm facing exceptional gains or losses in a year can indicate the one-time nature of these events and adjust its P&L to provide investors with a more realistic picture. For example, it can adjust for:

- Major gain from sale of division or asset;
- Major loss from isolated legal action.

Problems arise when pro forma statements are used to prettify or disguise the true financial condition.[25] In 2002, Nokia Corp, the Finnish wireless technology company reported a third quarter pre-tax profit of €1.1 billion in its pro forma statements. Without the pro forma adjustments, Nokia's pre-tax profit was at a much lower €281 million.[26]

In another example, the major mainframe software firm Computer Associates (CA) used a pro forma statement to disguise reality. CA reported 42 cents pro forma earnings for the quarter, while in reality it had a 59 cents loss under GAAP rules. In the several quarters of FY2000, CA inflated its revenue by approximately 25%, 53%, 46%, and 22% by including prematurely recognized revenue of $2.2 billion in 2000 and 2001.[27] As a US government official described it, "Like a team that plays on after the final whistle has blown,

23 Accounting.com. "What is GAAP?" Last accessed June 17, 2017. ► http://www.accounting.com/resources/gaap/.

24 US Securities and Exchange Commission. "Cautionary Advice Regarding the Use of 'Pro Forma' Financial Information in Earnings Releases." December 4, 2001. Last accessed July 29, 2011. ► http://www.sec.gov/rules/other/33-8039.htm.

25 US Securities and Exchange Commission. "Cautionary Advice Regarding the Use of 'Pro Forma' Financial Information in Earnings Releases." December 4, 2001. Last accessed July 29, 2011. ► http://www.sec.gov/rules/other/33-8039.htm.

26 Manuel, Gren. "European Interest Grows in Pro Forma Accounting." *Wall Street Journal.* January 8, 2002. Last accessed June 22, 2011. ► http://search.proquest.com/docview/398962008?accountid=10226.

27 US Securities and Exchange Commission. "SEC Files Securities Fraud Charges Against Computer Associates International, Inc., Former CEO Sanjay Kumar, and Two Other Former Company Executives." September 22, 2004. Last accessed June 19, 2007. ► http://www.sec.gov/news/press/2004-134.htm.

Computer Associates kept scoring until it had all the points it needed to make every quarter look like a win." CA kept its accounts open for additional days to create the illusion of increased revenue, leading to a "35-day month." After CA was forced to stop recognizing revenue prematurely, its stock price dropped over 43% in just one day. CEO Sanjay Kumar was charged with securities fraud and sentenced to 15 years in prison. The company also had to pay $225 million to harmed shareholders.

13.3.1.5 Case Discussion

Disney—Pro Formas

In its 2001 Annual Report, Disney used pro forma presentation to maintain the appearance of stability in its earnings per share. It reported in its formal P&L statement—which followed the guidelines of GAAP—a $0.02 *loss* per share. But in its pro forma "Financial Highlights" statement it showed a $0.72 pro forma *gain* per share. It reported certain transactions or events differently from the way they must be reported according to GAAP rules. Basically, it excluded from its earnings several items which it considered "one time events." Disney properly qualifies these results in footnotes. All of this is perfectly legal and Disney disclosed it. However, interpreting it requires a sophisticated reading of Disney's report.

13.3.2 Auditing

Given the potential for problems, how can the accuracy of financial information be protected?

An audit of a firm's financial statement means that an independent expert reviews the company's books for compliance with accounting principles. It is also a review of the ability of a firm's accounting system to deal with transactional data properly and effectively, such as through checking a random sample of transactions.

Another layer of financial control is the audit committee of the board of directors, whose task it is to ensure the integrity of the company's financial reporting. This committee generally oversees internal and external reporting and audit processes. This audit committee is comprised of independent (i.e. non-officer) directors. The actual process is delegated to internal employees of the firm or to external consultants or auditing firms.[28]

In the USA, the 2002 Sarbanes-Oxley Act created strict rules of responsibility for accurate financial reports. Auditing firms had to divest themselves of all non-accounting activities. The law established an Oversight Board to review the audits of public companies and to set guidelines for accounting firms.

13.3.2.1 Case Discussion

Disney—Auditing

Unlike its rivals Vivendi Universal and Time Warner, Disney avoided accounting scandals in the period under CEO Eisner. Its external auditors, PricewaterhouseCoopers (PwC), received $8.7 million for auditing Disney in 2001. That same year, Disney also paid PwC $43 million for consulting and other services, such as the design of a provided financial information system and its implementation.

Already prior to the enactment of a law that outlawed this type of conflict of interest,[29] shareholders asked that management drop PwC in either their capacity as auditors or consultants. The Disney board then voted to do so. This cut annual fees paid to PwC by 75%. Disney became the first major company to make such a move to separate the auditing and consulting.

13.3.3 Regulation of Accounting

13.3.3.1 Government Regulation

Government rules exist for the public and correct disclosure of financial information by companies whose stock is publicly offered. Accounting manipulations by some companies can discredit the entire economic system and reduce investor confidence, resulting in less investment and costlier private safeguards.

In the USA, the Securities and Exchange Commission (SEC) was created in 1934 to ensure the disclosure of important financial information

28 Burke, Frank M. *Audit Committees: A Guide for Directors, Management, and Consultants,* 3rd ed. New York: Aspen Publishers, 2004, 1–220.

29 Wall Street Journal. "Auditors Still Perform Nonaudit Services." April 3, 2002, C1.

from publicly traded companies. The act was passed in response to the Great Depression; generally, the public distrusted the reliability of a company's accounting information, and laws were therefore enacted that required companies to publish accurate information in their financial statements. The SEC has authority to establish standards, but has historically delegated the details to self-regulatory accounting bodies.[30] Other countries have similar agencies and procedures.

There are also several industry-specific accounting regulations. In the USA, the Federal Communications Commission established the Uniform System of Accounts (USOA) for telecommunications companies to separate regulated from unregulated activities.

13.4 Analyzing Financial Statements and Valuation of Media Firms

Now that we have the four major financial documents before us, based on established principles and verified by independent accountants how do we use and interpret them?

Securities analysis uses data from public financial accounting, plus projection into the future, and other factors. Securities analysts ask two basic questions when looking at a company: Is the firm financially sound? Is it earning an adequate rate of return? The answers are needed by investors to interpret financial statements and understand whether the company is a good investment.

13.4.1 Ratios and Metrics

Analysts use equations and ratios to compare a firm's performance over time and in comparison with others. Such ratios are published in many financial databases.

Several ways exist to use ratios:

- Comparisons among industries;
- Comparisons within industries to other companies;
- Comparisons among years, for the same company;
- Comparison with targets.

There are several basic categories of ratios, and within such categories there are several types. They will now be discussed.

13.4.1.1 Liquidity Ratios

Liquidity ratios are used to measure a company's ability to pay current liabilities with current assets. A company's ability to convert short-term assets into cash to cover debts is important. Bills need to be paid. A commonly used liquidity ratio is the *current ratio*.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The lower the ratio, the less likely a company is to be able to pay its debt obligations.[31] Generally, this ratio should be above 1.5.

In 2001, Microsoft had $39.6 billion in cash and short term investments (current assets). Compare this with the company's debt: Microsoft has no long term debt and its short term (current) liabilities equaled $11.1 billion.[32] Microsoft's current ratio was hence $39.6/11.1 = 3.3. A ratio over 3 normally indicates too much cash. Microsoft's balance sheet shows over three times the amount of cash necessary to pay off current liabilities and long term debt. Why isn't it putting this money into work? Unless it is saving resources in order to launch new products, build new production facilities, or make major corporate acquisitions, a current ratio this high usually shows that management is not using cash efficiently.

30 Financial Accounting Standards Board. "Facts about FASB." Last accessed July 29, 2011. ► http://www.fasb.org/facts/index.shtml.

31 Labyrinth Inc. "How do we interpret our financial statements?" 2005. Last accessed July 29, 2011. ► www.labyrinthinc.com/SharedContent/SingleFaq.asp?faqid=58.

32 Kennon, Joshua. "Analyzing a Balance Sheet." *About*. 2002. Last accessed July 29, 2011. ► http://beginnersinvest.about.com/library/lessons/nlesson3.htm.

13.4.1.2 Case Discussion

Disney—Liquidity Ratios

Disney's current ratio for 2004 was 0.89.[33] In comparison, its peer company Time Warner's current ratio was 0.98.[34] The industry average ratio for that year was 1.0. Disney's current ratio was thus below the industry average, suggesting a below-average ability to meet its short term debts. Below a ratio of about 1, a company likely faces some difficulty in meeting its debt obligations for the short term (one year or less). Disney was slightly below that line.

13.4.1.3 Leverage and Solvency Ratios

Solvency and leverage ratios are used to measure a company's ability to pay its *long-term debt* and thus avoid bankruptcy. These metrics determine if a company has over-extended itself through an excess of debt.

"Debt-to-Equity Ratio" (Debt Load)

A company's relative debt load is measured, in particular, by the debt/equity ratio:

$$\text{Debt To Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Equity}}$$

The company's total debt, both short and long term, is divided by the amount of the owner's equity. The ratio is also known as the company's "leverage." If the ratio is above 1.0, the firm owes more than it owns.[35] The debt to equity ratio helps give investors an idea as to whether a company can service its debt. If a company has a high debt to equity ratio within an industry, this should raise a red flag, especially if interest rates are on the rise (making it more costly to service the debt or roll it over) or if the company's cash flow shows volatility.

13.4.1.4 Case Discussion

Disney—Debt Load

Disney's debt to equity ratio in 2004 was 0.27. (In 2016 it was a much higher 0.47.) In comparison, Time Warner's debt to equity ratio in 2004 was 0.37. The media industry's average ratio in 2004 was 0.35, somewhat higher than Disney's. But for the overall corporate economy debt was much higher. For the S&P 500 index companies, the average debt to equity ratio was 0.85 in 2004. In comparison, Disney was not highly leveraged in that year.

13.4.1.5 Financial Measures

The P/E Ratio

The price–earnings ratio (P/E ratio) is the ratio of the company's current market value to its annual earnings (profits after tax and preferred dividends).

$$\frac{P}{E} = \frac{\text{Market Value Per Share}}{\text{Earnings Per Share}}$$

The *P*/*E* ratio measures the company's current market value per share relative to annual earnings (profits after taxes per share). The P/E ratio is a key valuation tool. However, while P/E ratios are available for traded companies whose stock price can be readily sold, they do not exist for untraded privately held companies, like Internet start-ups, which have no market price *P*.[36, 37]

The P/E ratio reflects the value the market has placed on a common stock. A high P/E of 25 and above means the market places a high expectation of future growth in the company's earnings. A high P/E ratio may also mean that the market is overvaluing the stock, or stocks in general. But it is also possible that earnings have dipped briefly, due to factors which the investors believe are temporary.

33 YCharts. "Walt Disney Current Ratio (DIS)." Last accessed July 6, 2017. ► https://ycharts.com/companies/DIS/chart/#/?format=real&units=&maxPoints=720&securities=include:true,id:DIS,,&endDate=&displayTicker=false&quotes=&correlations=&securitylistSecurityId=&calcs=include:true,id:current_ratio,,&zoom=&startDate=&recessions=false&chartView=&splitType=single&scaleType=linear&securitylistName=&securityGroup=.

34 YCharts. "Time Warner Current Ratio (TWX)." Last accessed June 9, 2011. ► http://ycharts.com/companies/TWX/current_ratio.

35 Kennon, Joshua. "Analyzing a Balance Sheet." *About*. 2002. Last accessed July 29, 2011. ► http://beginnersinvest.about.com/library/lessons/nlesson3.htm.

36 There are variations of a P/E ratio. The "trailing P/E" or trailing 12 months P/E ratio uses historical data for the most recent 12 months. Projected P/E or forward four quarters P/E ratio uses estimates for the next four quarters of a company's performance for a ratio. A third is a mixture of the previous two, combining the performance of the company for the past two quarters and the estimated performance for the upcoming two quarters to come up with a ratio.

37 Investopedia. "P/E Ratio: Conclusion." Last accessed July 18, 2011. ► http://www.investopedia.com/university/peratio/peratio5.asp.

A P/E can be high if the expected annual growth rate of profits is high, for example if the firm operates in a market niche with strong growth potential.

Similarly, a low P/E ratio may mean that a company is being undervalued or that future prospects for a company are not promising and are affecting market confidence in the stock.

Many mature industries, such as utilities, will have lower P/E ratios than new tech companies which may have very high P/E ratios due to future performance expectations. It is therefore important that P/E ratios be compared across the same industries.

To estimate the value of an untraded company for which no stock prices exist, one can take the expected earnings and multiply them by the P/E of a comparable company B or others from the same industry that are traded.

And what if there are also no earnings at all for the company, as is typical for dot-com companies? With neither an "*E*" or a "*P*", a P/E ratio does not exist. Thus, valuation must be based on metrics that are not dependent on earnings. These methods include the use of other ratios such as:

- Debt/contributed capital;
- Debt/subscriber;
- Debt/net capital expenditures.

Market/Book Value Ratio

Price/book (P/B) ratios compare a stock's market value to its book value:

$$\text{Market to Book Value} = \frac{\text{Market Price Per Share}}{\text{Book Value Per Share}}$$

The "book value" is the net amount of assets shown in the firm's balance sheet—total assets minus total liabilities. A low P/B ratio could mean that the stock is undervalued by the market relative to its assets. A higher P/B ratio implies that investors expect management to create more value from a given set of assets. It may also mean that the market value of the firm's assets is significantly higher than their accounting value. It may also mean that the assets have been acquired a long time ago and their value today is much higher.

The book value has less relevance to the evaluation of many much of earning power is due to intangibles such as copyrights and patents that were created and booked as expenses rather than capital assets. If shown as assets, the company's book value would show a much greater value and the ratio would be higher.

13.4.1.6 Performance Ratios

If investors in Disney's stock want to calculate the opportunity costs of investment, they would select a set of peer stocks and compare the performance with Disney.

Operating Ratio

The operating ratio shows a company's efficiency by comparing net sales to operating expenses. It is calculated as:

$$\text{Operating Ratio} = \frac{\text{Operating Expenses}}{\text{Operating Revenues}}$$

This ratio measures the company's effectiveness in using resources to run the company's operations. The smaller the rate, the greater the ability to create profits. However, the ratio does not take into account repayment of debt, which is not part of operating expenses. A firm may be efficient by this ratio but still fail if its debt is too high for repayment.[38]

■ Operating Margin

Operating margin measures profitability, and shows how much of each dollar of revenue is left over after costs of goods sold and operating expenses are subtracted.:

$$\text{Operating Margin} = \frac{\text{Operating Income}}{\text{Net Sales}}$$

For example, if a firm's operating margin is 15% (0.15), it is earning 15 cents on each dollar of sales. Note that this performance does not include interest payments, taxes, or one-time special events.

13.4.1.7 Profitability Ratios

Profitability ratios show how successful a company is returning profits on its investment.

$$\text{Profit Margin} = \frac{\text{Profit}}{\text{Revenue}}.$$

38 Stickney, Clyde and Roman Weil. *Financial Accounting: An Introduction to Concepts Methods and Uses*. New York: Dryden Press, 2000.

Generally, the terms "income," "earnings," and "profits" are used synonymously. Profitability "margins" are profits expressed as a percentage of revenues. They show a firm's ability to produce earnings during that period, and are an important benchmark against other companies in the industry. Depending on the definition of "profit" these measures are either "gross margin," "operating profit margin," "pre-tax margin," or "net profit margin." The latter—arguably the most meaningful measure—is also described as the "profit margin."

13.4.1.8 Return on Assets and on Investment

Whereas the preceding section looked at a firm's performance relative to its sales—profit per dollar of sales—a firm's success ultimately lies in profitability relative to its assets, or its investment, or of the capital contributed by investors.

Return on assets (ROA) and on investments (ROI) allow investors to see earnings generated by a company's assets and investment.

Return on Assets

The ROA is net income divided by average total assets:

$$\text{Return on Assets}\left(\text{ROA}\right)=\frac{\text{Net Income}}{\text{Total Assets}}$$

This shows profit for each $1 in assets and relates the operating performance to investments of a firm, independent of the financing used in the acquisition of assets (i.e. whether equity or debt).[39] The ROA also shows the asset-intensity of a business.

However, a high percentage of a media or tech company's assets are intangibles, much of them of uncertain value. Thus, in the case of Disney where maybe 80% of assets are intangibles, looking at metrics like ROA and ROI will not provide good information. In these situations, it would be more useful to look at the company's cash flows, subscriber numbers, or other "hard" measures to get a better idea of performance.

Return on Investment

A firm's ROI is a measure to compare the profitability of a firm's specific business project, or of an investor's return for his or her investment. It is basically the profit rate for the investment, the "bang-for-the-buck." It measures the efficiency of the investment in terms of profits relative to investment:

$$\text{Return on Investment}\left(\text{ROI}\right)=\frac{\left(\text{Net Income}+\text{Interest Expense}\right)}{\text{Total Assets}}$$

13.4.1.9 Growth Trends

Balance sheets are a snapshot in time. In contrast, profit-and-loss statements are the results for a period of time—typically a year or a quarter. What investors are often looking for is a trend. This has two dimensions: a growth rate and its volatility. Companies, especially publicly traded companies, seek a decent-sized growth rate but also that it be stable. Meeting the expectations of investors and analysts helps ensure a favorable stock price by lowering the riskiness of a stock. To maintain this stable income and growth rate over several time periods, companies use an "accounting cushion" in which they overstate liabilities in strong years and then overstate the income in a weak period.

13.4.1.10 Case Discussion

Disney—Growth

Disney's sales growth over the year preceding the confrontation over CEO Eisner was about even with Time Warner's (3.8% vs 3.7%) and much better than the industry average of negative 4.5%; but it was lower than that of the S&P 500 companies (13.0%). More importantly, Disney's net income (profits) rose by 8.0% whereas Time Warner's dropped by 13.6%. Disney's annual average five-year growth (2001–2005) rate in net income was very high at 35.1% and should have made its shareholders happy with management. To put this in perspective, however, the S&P performance was even higher, which can be explained by the year 2001 being a recession year and hence a low base for any subsequent income growth calculation.

13.4.1.11 Non-financial Business Metrics

Not all metrics for judging a firm's performance are financial in nature. Non-financial information about a company can be used along with income and cash flows to provide a better picture of performance. Non-financial measures of company performance include:

39 Stickney, Clyde and Roman Weil. *Financial Accounting: An Introduction to Concepts Methods and Uses.* New York: Dryden Press, 2000.

- Customer churn;
- Return rate of products and defect rate;
- Customer reorder rate;
- The quit rate of the work force;
- New patents;
- The share of sales from new products;
- The ratio of patents to research and development expenses;
- Average time to present the product to the market;
- The conversion rate from solicitations to sales;
- Cost of acquisition per new customer acquired.[40]

These non-finance measures are not often used. Companies are reluctant to report some of this data. Even when it is favorable, they fear being locked into the future release of unfavorable data, or to become liable for erroneous numbers, or to reveal information to competitors and negotiating partners. However, there is a push to disclose such information to investors, coupled with a "safe harbor" shield against liability resulting from the disclosure of non-traditional information.

13.4.1.12 Social Accounting

Social accounting—also known as social auditing, social reporting, ethical accounting, or triple-bottom-line—is a way of measuring and reporting on an organization's social, environmental, and ethical performance.[41] Social accounting aims to bring quantitative measures to socially beneficial activities, based on the concept that "if you can't measure it, you can't manage it."[42]

There are many different techniques for looking at the social impact of an organization. Some are quantitative, some use benchmarking, and others are more in the nature of inspired—or inspiring—story-telling, and still others are a PR effort. Some items that might be reported in social accounting are provided in Table 13.1.[43]

Table 13.1 Social Accounting Targets

Commitments	Metrics
Corporate philanthropy goals	Amount of money given; Hours volunteered
Environmental sustainability principles	Tons of solid waste going to landfill; Carbon emissions
Code of ethics	Number of ethics complaints
Commitment to open communication with stakeholders	Performance records of interaction with major stockholders
Diversity	Employee and management diversity; Vendor diversity; Number of complaints and safeguards

The number of such social audits has grown, but they are the exception nevertheless. Even companies with a strong sense of corporate responsibility are reluctant to issue social audits because they fear that it might expose them to unwanted negative media coverage and criticism from stakeholder groups.[44] Another reason is that many of the dimensions of social accounting are hard to define, measure, quantify, and value. But as information technology spreads into all aspects of economic and social life, it will become easier to track the impacts of a company's activities in new ways, both by the company itself and by outside groups and governments.

40 Litan, Robert E. and Peter J. Wallison. "Beyond GAAP." *Regulation* 26, no. 3 (2003): 52.

41 Social Audit Network. "What is social accounting and audit?" Last accessed July 6, 2017. ► http://www.socialauditnetwork.org.uk/getting-started/what-is-social-accounting-and-audit/.

42 Norman, Wayne and Chris MacDonald. "Getting to the Bottom of 'Triple Bottom Line.'" *Business Ethics Quarterly* 14, no. 2 (April 2004): 243–262.

43 Zadek, Simon. "Social Auditing." *The New Economics*. June 1995. Last accessed July 29, 2011. ► http://www.fpm.com/script/UK/Jun95/social.htm.

44 Zadek, Simon. "Social Auditing." *The New Economics*. June 1995. Last accessed July 29, 2011. ► http://www.fpm.com/script/UK/Jun95/social.htm.

13.4.1.13 Case Discussion

Excepts from Disney's Citizenship Report

"Message from Our CFO.[45]
Dear Stakeholders:
… I am happy to report that 2012 was not only another year of record financial results for Disney, it was also a banner year for our citizenship performance. We became the first major media company to build upon our landmark nutrition guidelines, and introduced food advertising standards for kids. We reduced our net direct and indirect greenhouse gas emissions, achieving our targets for the year and taking another major step forward in our efforts to reduce the Company's impact on climate change. We also implemented new policies to reduce the risk for workers and families along our extended supply chain.

We are proud of the progress we have made against these targets. [Figure 13.1] outlines our 2012 performance on the 65 citizenship targets.

Examples of these projects include:

- A groundbreaking, play-based curriculum that transforms unstructured recess time into engaging learning time for *179,000 kids* across the U.S.
- A new creative learning program in China serving more than 68,000 rural children in grades 3–5.
- A creativity lab themed in virtual worlds reaching 450 kids in the U.S. and around the world.
- A theater program that brings Disney licensed musicals into underserved schools in Nashville, TN, allowing 305 kids, their teachers, and their families to participate in all aspects of production.
- A hands-on afterschool learning laboratory for more than 300 kids from disadvantaged populations in Los Angeles, CA."

Conclusion of this part of the Case Discussion: Disney's *Citizenship Report* shows a substantial effort to identify, structure, and monitor the company's social performance. In addition to being a sign of social responsibility as a company value, the effort also helps the company to buttress a wholesome family-oriented image. As one might expect in a document driven by that goal, the positive dimensions of Disney's social contributions are listed while negatives are mostly left out. That said, the report is impressive and stands out among large corporations.

13.5 The Valuation of Media Properties

Investment guru Warren Buffet once said: "If I were teaching an MBA class on finance, the final exam would be one question: How do you value an Internet company? Anyone who turned in an answer would fail the exam."[46]

How, in general, are companies valued? To investors this is a critical question. There are several techniques.

13.5.1 Cost Approaches

Cost approaches include "book value" and "historic cost," with the value of a company computed as the sum total of its past investments in assets, minus depreciation. Another approach is that of "replacement cost"—the value of the assets at the price of replacing them today.

There are several disadvantages to the cost approach, including inadequate correlation of cost with value. For example, not all development costs lead to successful inventions or products. But some successful developments are worth a lot more than the cost of creating them.[47] The advantages are that the historic numbers are available to accountants and have a certain "hardness" and are thus less susceptible to manipulation.

13.5.2 Income Approaches

In economic terms, a company can be valued by the income streams that it generates. That, after

45 Disney FY12 Citizenship Report. Retrieved from ▶ https://ditm-twdc-us.storage.googleapis.com/FY12DisneyCitizenshipSummary_FINAL_0.pdf

46 De Figueiredo, John M. "Finding Sustainable Profitability in the E-commerce Continuum". *Massachusetts Institute of Technology*. July 15, 2000. Last accessed July 7, 2017. ▶ http://sloanreview.mit.edu/article/finding-sustainable-profitability-in-electronic-commerce/.

47 World Intellectual Property Organization. "WIPO National Workshops on Assessment and Valuation of Inventions and Research Results for Technology Transfer and Commercialization." August 1997. Last accessed July 6, 2017. ▶ http://www.wipo.int/edocs/mdocs/innovation/en/wipo_avi_ph_97/wipo_avi_ph_97_5.pdf.

Status	Completed	On Track	Getting Started	Did Not Achieve
Total	15	43	5	2

Target	Status	Summary
By 2020, contribute more than 5 million hours of employee community service through the Disney VolunteEARS program		In 2012, Disney employees volunteered more than 586,000 hours through the Disney VolunteEARS program.
By 2014, set a baseline for the percentage of employees who volunteer at least one hour of service annually in the VolunteEARS program		We identified a system to help track participation that will be implemented by 2014.
By 2020, positively impact the lives of 10 million children and families in need		In 2012, we reached over 563,000 kids and families in need through a variety of efforts.
By 2014, donate 18 million books to organizations that provide new books to children in need		In 2012, we donated more than 8 million books.
By 2012, engage over 4 million players through online games to raise awareness of, and encourage participation in, giving to people and the planet		In 2012, we engaged more than 2.4 million players through our Pixie Hollow and Club Penguin properties, but we did not achieve this target.

Fig 13.1 Disney social accounting report

all, is what most investors seek. Technically, the incomes are discounted so as to include future earnings in present valuation. Discounting also incorporates the risk factor. The measure of value is the asset's earnings as related to the imponderables inherent in the business situation. This includes risks of economics, technology, and politics. Such overall risk is reflected in the discount rate of the asset.

The formula for discounted present value is $\mathrm{NPV} = \sum_{t=1}^{T} \frac{\mathrm{CF}_t}{(1+r)^t} - \mathrm{CF}_0$, where T equals the life of the asset, CF_t equals the cash flow in period t, and r is the discount rate, the investor's required rate of return for investments with comparable risk. CF_0 is the investment in period zero itself.

The income approach is suited for intangible assets, too. It can be used for the appraisal of contracts, licenses, royalty agreements, patents, trademarks, copyrights, and franchises.[48]

13.5.3 Multiples Approach

One could compare a company whose value is being sought to one whose value is known. In real estate, the value of a house is often based on "comps"—comparable properties that have

48 World Intellectual Property Organization. "WIPO National Workshops on Assessment and Valuation of Inventions and Research Results for Technology Transfer and Commercialization." August 1997. Last accessed July 6, 2017. ► http://www.wipo.int/edocs/mdocs/innovation/en/wipo_avi_ph_97/wipo_avi_ph_97_5.pdf.

sold. But what are comparable companies? One way to deal with this question is to make use of the accounting ratios that were described earlier. One takes the financial ratios and so on for other companies that are traded in the stock market and hence obtain a known value based on the collective wisdom of the market, and extrapolate to compute the value of a non-traded firm. Examples of these metrics include the P/E ratio, the ROI, the value per subscriber, cash flow multiples, ARPU (average revenue per user) multiples, and revenue multiples. For example, suppose one wants to estimate the value of company A in industry X. A is not traded in the stock market. A has earned, on average over the past three years, $25/share/year. The average P/E ratio R in the industry X is 10. Then a share of A should be worth, *ceteris paribus*, $P = E \times R = 25 \times 10 = 250$.

A similar approach can be used for an extrapolation of revenues, subscribers, or ARPU.

Other methodologies include that of looking at the share price of a company over a longer period, and using this as the yardstick for valuation of such a company. This would be most useful where some external shocks or speculation have left that share price temporarily at an atypical level, either very low or very high, for reasons that have little to do with the company itself. Another valuation approach is that of options pricing. That approach is discussed in ► Chap. 4 Technology Management in Media and Information Firms and in ► Chap. 7 Intellectual Asset Management.

13.6 The Balance Sheet

The balance sheet consists of three main parts: *assets*, which includes anything of value to the company; *liabilities*, which include bank loans, mortgages, and bonds the company has issued; and shareholders' *equity*.

Every balance sheet must "balance," by definition. The total value of all assets must be equal to the value of all liabilities plus shareholder equity.[49] Equity has two sources—cash contributed by investors in return for stock issued by the company, and retained earnings, which are profits not paid to shareholders as dividends. The company's "book value" is the value of assets minus depreciation intangible items such as intellectual assets and goodwill, and minus all liabilities.

For not-for-profit organizations, the "statement of financial position" is analogous to the corporate balance sheet. The document identifies "net asset value" instead of stockholders' equities.[50]

Thus, the balance sheet shows how much the company owns, how much it owes, and what stockholders own. This report is presented in the annual report to shareholders and in the reports filed with regulatory agencies (in the USA, as part of the well-known Form 10(k)). The information is made available through the company itself or through financial information databases such as ► www.SEC.gov,[51] ► www.finance.yahoo.com, ► www.thestreet.com, and ► www.bloomberg.com.

Table 13.2 provides an example of a balance sheet. The company's total assets, at the end of the year 2016, were $15,557,000, composed of total fixed assets of $1,600,000, total current assets of $6,072,000, and cash on hand of $7,885,000 (mostly accounts receivable, i.e. payments owed to the firm). Liabilities consist of current liabilities of $11,137,000, mostly unearned revenues (basically prepaid services such as subscriptions that must now be performed or delivered by the firm). Also considered a liability is the paid-in capital, including capital reserves. The "deficit" line (retained losses or earnings) serves to balance total assets with total liabilities (including capital). Where liabilities otherwise exceed assets, this line is negative, and where assets exceed liabilities this line is in surplus and positive (retained earnings). As can be seen, the firm had an accumulated deficit of $2,693,000.

A balance sheet is only a snapshot of a company's financial condition at a particular moment, and it comes with many imperfections and judgment calls that are described below.

One year later, the company was in a similar position. When it comes to assets except a drop of 20% in cash on hand. The amount of current liabilities fell sharply by 36%, mostly from a reduction in "unearned revenues," which are

49 Kennon, Joshua. "Analyzing a Balance Sheet." *About*. 2002. Last accessed July 29, 2011. ► http://beginnersinvest.about.com/library/lessons/nlesson3.htm.

50 Smith, Gordon V. and Russell L. Parr. *Valuation of Intellectual Property and Intangible Assets,* 3rd ed. New York: John Wiley & Sons, 2000, 515–544.

51 The SEC's Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system provides automated collection, indexing, forwarding, etc. of submissions by companies and others who are required to file forms with the SEC.

Table 13.2 Example of a balance sheet ($ thousands)[a]

	December 2016	December 2017
Assets		
Fixed assets		
Computers	$732	$977
Infrastructure	$625	$569
Office equipment	$243	$118
Total fixed assets	$1600	$1664
Current assets		
Accounts receivable	$5347	$5472
Prepaid tax	−$20	$15
Miscellaneous receivables	$745	$455
Total current assets	$6072	$5942
Cash on hand	$7885	$6328
Total assets	$15,557	$13,934
Liabilities		
Capital		
Reserves	$693	$693
Invested equity capital	$6420	$5038
Deficit	−$2693	$1058
Total capital	$4420	$6789
Current liabilities		
Creditors	$63	$268
Wage taxes and soc. securities	$98	$155
Unearned revenues	$9791	$6204
Personnel fund	$438	−$210
Miscellaneous Payables	$747	$728
Total current liabilities	$11,137	$7145
Total liabilities	$15,557	$13,934

Table based on Ripe Network Coordination Center. "Balance Sheet." Last accessed July 6, 2017. ► http://web.archive.org/web/20101128052610/http://www.ripe.net/ripe/docs/ar2002/balance-sheet.jpg

prepaid sales where the product must still be delivered by the company. Also, the invested equity capital declined, suggesting a distribution by the company to shareholders. In consequence, the accumulated deficit had now become a profit of $1,058,000.

To be most useful, balance sheets must be compared with previous ones for the same company with the methodology held constant, and also compared with those of other companies.

13.6.1 Assets

Assets are things that a business owns, like a building, or has the right to use, for example copyrights. It also includes acquisitions. There are two classes—monetary assets and non-monetary assets.

Assets are typically valued according to *historical cost*, that is, acquisition costs. Acquisition cost are certain, in contrast to "fair market value," which is often quite unknown.[52] According to a study of 3500 US companies over a period of two decades, there has been an increase in the gap between the book value (acquisition cost minus depreciation) and market value. In 2010, the book value was only 28% of the market value, while back in 1978, it had been 95%.[53]

The gap is even wider for media and tech companies. Intangible assets can make up 80% or more of a media company's value. But traditional accounting methods do not capture the true value of these intangibles. Balance sheets report only 15% of the true value of such companies.[54]

13.6.2 Depreciation and Amortization of Assets

A key issue in accounting is determining if the costs are investments or expenses. Classifying the cost as an investment, which is referred to as a "capitalization," distributes the expense over the

52 Encyclopedia4u. "US Generally Accepted Accounting Principles." March 30, 2004. Last accessed July 29, 2011. ► http://www.encyclopedia4u.com/u/us-generally-accepted-accounting-principles.html.

53 McClure, Ben. "Intangible Assets Provide Real Value to Stocks." *Investopedia.* 2009. Last accessed July 14, 2010. ► http://www.investopedia.com/articles/03/010603.asp.

54 Baukney, Heather. "Intangible Assets: an interview with Baruch Lev." *ITworld.* April 3, 2001. Last accessed July 6, 2017. ► http://www.itworld.com/article/2797427/enterprise-software/intangible-assets--an-interview-with-baruch-lev.html.

lifetime of the asset, which reduces annual cost and raises profit. It results in more assets relative to debt. In contrast, an *expensing* of the cost immediately will lower profits for that year, lower taxes in that year, but raise them in subsequent years.

Amortization is the spreading of the cost of an asset over a period of time, usually several years. Depreciation is a type of amortization, accounting the decrease in the value of an asset over time.[55] There are several ways to calculate the depreciation on an asset. "Straight-line depreciation" spreads the depreciation expense evenly over the years of the asset:

$$\text{Annual Depreciation} = \frac{\text{Cost} - \text{Salvage Value}}{\text{Estimated Life}}$$

An "accelerated depreciation" can be used when the earning power of an asset declines as it ages, but more rapidly at first. There are therefore larger depreciation charges in the early years of the asset's life.

Tax authorities provide a table of acceptable lives for goods and property that are to be used with the corresponding depreciation method.

13.6.2.1 Amortization of R&D, Intellectual Assets, and Networks

As far as accounting is concerned, R&D activities do not create assets but only expenses. Accounting rules require the immediate expensing of R&D. The justification is that the future benefits of most R&D are too uncertain for them to be called an asset (capitalization). This pushes, in particular, start-ups into the red since they show only expenses and no assets in return.[56] However, when a patent is actually bought from a patent holder, it is then treated as an asset (at the acquisition price plus transaction costs) and can be amortized over its legal or economically useful life—whichever is shorter.

In the USA, the rules, as previously mentioned, are set in FASB "Statement 142" which decrees that patents, copyrights, and trademarks with finite lives are amortized over their useful lives, and for not more than 40 years.[57] Thus, although copyrights are granted to the author of a work for the life of the creator plus 70 years—which could easily exceed 100 years—according to the FASB rules the cost of the copyright is amortized only over the expected life of the benefit, not to exceed 40 years. Similarly, the cost of creating or acquiring trademarks must be amortized over the period of the benefit, not to exceed 40 years.

13.6.2.2 Impairment, Write-offs, and Write-downs

Often, the value of an asset drops, and accounting reports need to deal with this to maintain a realistic description of the company. *Impairment* is the reduction of asset value carried in the books when the market value of that asset drops below book value.[58] In contrast, a "write-off" is used to treat uncollectible accounts, like an insolvent debtor's obligations. For instance, in 2002, AOL Time Warner was forced to recognize an impairment of $54 billion, attributed mostly to the AOL acquisition. Sprint, the wireless and wireline company, posted a $1.9 billion net loss in 2004.[59] It analyzed long-distance business trends and then took a $3.5 billion impairment charge on these assets. Sprint also took a $1.2 billion write-down (loss) on its spectrum for use of the Multichannel Distribution Service, a form of microwave video distribution.

13.6.2.3 Case Discussion

Disney—Write-offs and Write-Downs

Compared to its peers, Disney had a low use of write-downs. Industry write-downs in 2004 include AOL Time Warner with $98 billion, Viacom with $23 billion, and News Corp with $10 billion. In contrast, Disney's 2004 impairment write-down was just $64 million. Thus, Disney had none of the gigantic write-downs of several other media companies, though there had been several large ones in other years, but not of the same order of magnitude. In 2001, the company recorded restructuring and impairment changes totaling about $1 billion, related to the closure of Internet portal GO.com and of approximately 70 Disney stores.

55 McGrahan, Kathleen and Gordon Shillingaw. *Accounting: A Management Approach*. Homewood, Il: Irwin, 1993.

56 Stickney, Clyde and Roman Weil. *Financial Accounting: An Introduction to Concepts Methods and Uses*. New York: Dryden Press, 2000, 437.

57 In contrast, intangible assets whose lives are indefinite are not amortized but are tested yearly for impairment. Federal Accounting Standards Board. "FASB Codification." *FASB*. Last accessed July 20, 2011. ► http://www.fasb.org/home.

58 FASB. "Statement of Financial Accounting Standards No. 53- Financial Reporting by Producers and Distributors of Motion Picture Films." December 1981. Last accessed July 10, 2017. ► http://www.fasb.org/summary/stsum53.shtml.

59 Gross, Grant. "Sprint Records $1.9 billion loss on impairment charge." *IDG News Service*. October 19, 2004. Last accessed July 29, 2011. ► http://www.networkworld.com/news/2004/1019sprinrecor.html.

13.7 Liabilities

Liabilities are a company's obligations to its creditors. Liabilities include accounts payable (amount due for goods and services purchased by the company), bank loans, notes and bonds payable, and wages and salaries due. "Current liabilities" are short-term debts which have to be paid within one year. Long-term debt includes mortgages and business loans.

Problematic issues of accounting liabilities in the media and information sector include stock options, pension plans, and off-balance sheet financing.

13.7.1 Stock Options

A popular method of providing tax-favored compensation to employees in the high tech and new media industries is the granting of stock options.

There are two types of stock options: incentive stock options (ISOs) and employee stock purchase plans (ESOs).[60] ESOs are designed mainly to benefit rank and file and middle employees, by allowing all eligible employees to purchase the company's stock at a discount over market price, for example 15%. An employee is not subject to income tax on the benefit of the discount until the stock is sold off, at which point the proceeds are considered a capital gain, but taxed at a lower rate than ordinary income. In contrast, ISOs are created to attract high rank executives and key employees. Companies issue stock options to employees to raise productivity or to attract new talent by giving them a chance to get in "on the ground floor."[61] In companies where cash is scarce, options are a good way to keep employees invested in the company. There are tax incentives to ISOs and ESOs. The rise in share value is considered a capital gain and is therefore taxed at a much lower rate than regular income. For example, in 2016 the capital gain would be taxed at a maximum rate of 20% while ordinary income would be taxed at up to almost 40%.

Typically, a company treats employees' compensation such as wages as an expense item. But when high-tech companies extended stock options as a form of compensation they typically did not expense them. This reduced their reported expenses and made the companies look more profitable. For example, the expensing of stock options would have reduced reported earnings in the semiconductor manufacturing industry in one year by an average of 40%.[62] Cisco received a tax benefit of nearly $2.5 billion from its use of ESOs. As a result the company paid little or no federal income taxes, while reporting $2.67 billion in profits in its financial statements.

This then became a controversial issue. Opponents of high compensation for top management regard this practice as a way to transfer much wealth to top executives without it showing up as an expense, and for these managers to avoid paying their fair share in income taxes.

In America, the FASB rules now require companies to treat options as an immediate expense, which reduces reported profits. However, it is difficult to value stock options accurately when there is no market price, in order to expense them.

Another variable of stock option compensation involves their "backdating." Companies select favorable dates on which to base the options price. The act of backdating, in itself, is not illegal. But altering dates on the financial statements and reports is illegal.[63] In 2007, nearly 170 high-tech companies were investigated for "backdating" options.

60 Cavitch, Zolman. "Business Organization with Tax Planning (10–133), Part 21 Taxation of Executive Compensation, 10–133 Business Organizations with Tax Planning §133.01 Appeal and Limitations of Stock Options." New York: Matthew Bender & Company, Inc., 2004.

61 Glassman, James K. "Running an Option." *National Review Online*. November 7, 2003. Last accessed July 10, 2017. ► http://www.nationalreview.com/article/208523/running-option-james-k-glassman.

62 Morgenson, Gretchen. "Litmus Test for Ethics: Options." *New York Times*, March 21, 2004. Last accessed July 10, 2017. ► http://www.nytimes.com/2004/03/21/business/market-watch-litmus-test-for-ethics-options.html.

63 Regan, Keith. "Take-Two in SEC Crosshairs." *E-Commerce Times*. April 5, 2007. Last accessed July 29, 2011. ► http://www.technewsworld.com/story/gaming/56727.html.

13.7.2 Case Discussion

Disney—Stock Options

Disney provided stock options worth more than half a billion dollars between 1995 and 2000. If this company had counted these payouts as executive compensation it would have significantly reduced its reported earnings.[64] Between 1991 and 1995, Disney CEO Michael Eisner earned $234 million. In 1998 his overall compensation had increased to $570 million, mostly due to stock options that were awarded early in his tenure that had become exercisable. Overall between 1998 and 2000, Eisner earned more than $680 million from the exercise of stock options.[65] Disney did not count the stock options it granted executives as an expense, claiming that they were not executive compensation but merely rearrangements of the corporate financial structure.

Disney was not charged with improper backdating of stock options, but when it bought Pixar in 2006 it also acquired Pixar's backdating problems. That company had granted its employees backdated options after 1997, totaling $323 million. Disney, as Pixar's new owner, was liable for $33.5 million. Steve Jobs, Pixar's CEO and subsequently Disney's largest shareholder, had granted these backdated options to other employees and claimed that he did not know the legal and accounting ramifications. (Jobs himself received such options at his other CEO job at Apple. For those transactions, he got off the hook without being charged for securities law violation, but Apple's CFO Fred Anderson and General Counsel Nancy Heinen were charged with falsification of documents, pleaded guilty, and were convicted.)

13.8 Income and Profit Statements

The income statement is also referred to as the "profit and loss (P&L) statement" or as the "earnings statement."[66] It may well be the most important financial statement a company issues. P&L is important because it gives an investor or observer an idea of how profitable the company is overall. Via P&L one can also look at the company's margins and other financial and operating ratios to see how well it does in terms of generating profit and compare this to other players in the industry.

We must understand that the concept of "income" can be expressed in a variety of ways.

The first line on any income statement is *total revenues* (total sales). Companies often break up revenue into different categories according to divisions, activities, or geography. For start-up companies, investors turn to revenue and its growth as an indication of future potential.

Gross profit is the total revenue generated minus the cost of creating that revenue, typically subtracting the cost of goods sold. COGS includes inputs and production expenses, but net expenses such as salaries, taxes, and distribution cost.

Gross profit is used to calculate *gross margin*, which can be found by dividing gross profit by sales revenue. It is a measure of a company's efficiency.

Operating income measures the money generated from its operations (without income from investments in other businesses).

Operating margin is the ratio of operating income and total operating revenue. It can be used to compare the quality of a company's operations to that of its competitors.

Net income is the total profit made by a business for the period, the "bottom line." The *net profit margin* is the profit that a firm generates from every $1 it earns.

Earnings per share (EPS) is the profit gained on every share. It is calculated by dividing net income by the shares outstanding. The number of outstanding shares can vary since the company can increase the number of shares through the issuance of stock options, convertible bonds, or secondary stock offerings. Therefore, a related measure for profits, "diluted earnings per share," shows the EPS if all diluted shares outstanding (converted stock, stock options, etc.) were included.

Financial statements of not-for-profit organizations are similar to the income statements of for-profit companies. Instead of "profit" they might show an "excess of income over activity expenditures." Such surplus must be retained

64 Epstein, Edward Jay. *The Big Picture, The New Logic of Money and Power in Hollywood*. New York: E.J.E. Publications, Ltd., Inc., 2005.

65 Hodgson, Paul. "Incentivizing Michael Eisner." *Forbes*. April 1, 2004. Last accessed July 10, 2017. ► http://www.forbes.com/2004/04/01/cz_ph_0401opiniondisney.html.

66 Kennon, Joshua. "How to Calculate Return on Assets or ROA." *The Balance*. Last updated December 30, 2016. ► https://www.thebalance.com/return-on-assets-roa-357592.

within the organization or be spent on its purposes. It cannot be paid out as a dividend to the nominal owners such as trustees.

To calculate income, companies have two basic accounting methods available: the *cash method* or the *accrual method*. The cash method recognizes income and expenses when money is actually received or paid. But for financial reporting, the GAAP principles require firms to use accrual based accounting, where revenue is recorded when it is earned, not when the money is actually received. The tax code requires companies to use this method of accounting for tax filings.

13.8.1 EBITDA and Other Profit Definitions

There are other metrics for earnings performance. EBITDA stands for "earnings before interest, taxes, depreciation, and amortization." It reports how much a company would have made if it did not have to pay interest on its debt; pay taxes; or did not take depreciation and amortization charges i.e. capital expenditures.[67] EBITDA is a popular but controversial measure because it can make unsuccessful firms often look good. It does so by omitting these often substantial elements of cost. The legendary investor Warren Buffet summed it up, "EBITDA would only make sense if capital expenditures are funded by the tooth fairy."[68]

However, EBITDA can provide a relatively good "apples-to-apples" comparison between companies and between time periods because it eliminates the accounting decisions that are somewhat within management discretion; tax payments that are based on a variety of income and expense statements and whose timing can be somewhat juggled; and depreciation that can be treated in a variety of ways, such as being accelerated and front loaded. EBITDA can be, in particular, a useful measure of firms with low or long-lasting capital equipment. In such a situation, depreciation and amortization is fairly steady.[69] But EBITDA is a poor measure of firms in an industry with big technological change, where capital assets are large but short-lived, or where significant upgrade investments are needed to stay up to date. In these cases, EBITDA would project a rosier picture than reality.

The French media conglomerate Vivendi Universal reported $7.9 billion in profit for the three years ending 2002, not accounting for interest and related expenses. If those had been included, its income would have been negative by $6.5 billion.[70] Getting nervous, Vivendi's board called in the investment bank Goldman Sachs to go over the company's financials. According to media mogul Barry Diller, "When Goldman came out with its report, the board members all said, 'Oh my God.'" The board had been focused on the increase of EBITDA and did not realize the full income picture, or so its members later claimed.

13.8.2 Case Discussion

Disney—Income Statement

The income statement shown in Table 13.3 for 2004 shows Disney's performance (Main headings are bolded). Its revenue from all of its operations totaled $30.8 billion, or about $31 billion when including revenue from investments. This was offset by the cost of operations and other items such as taxes which totaled $28.8 billion. Its net income was $2.345 billion. Disney's net income rose from $1.3 billion in the preceding year, 2003, by 85%. Earnings per share were $1.12 in 2004 versus $0.65 in 2003.

To calculate Disney's EBITDA, one adds to the net earnings the cost of interest, taxes, and the substantial depreciation costs booked against its hotels, theme parks, copyrighted films, satellite transponders, and so on. EBITDA is then determined to be $5.5 billion, or more than twice as high as net earnings. The calculation follows:

Net earnings	$2345
Interest paid	$624
Income taxes paid	$1349
Depreciation	$1198
Amortization of intangibles	$12
EBITDA	**$5528**

67 Kennon, Joshua. "How to Calculate Return on Assets or ROA." *The Balance*. December 30, 2016. Last accessed July 10, 2017. ► https://www.thebalance.com/return-on-assets-roa-357592.

68 MacDonald, Elizabeth. "The Ebitda Folly." *Forbes*. March 17, 2003. Last accessed July 10, 2017. ► https://www.forbes.com/global/200.3/0317/024.html.

69 McDonnell, Sharon. "*EBITDA* ComputerWorld." *ComputerWorld*. January 8, 2011. Last accessed July 29, 2011. ► http://www.computerworld.com/s/article/55895/EBITDA.

70 MacDonald, Elizabeth. "The Ebitda Folly." *Forbes*. March 17, 2003. Last accessed July 10, 2017. ► https://www.forbes.com/global/2003/0317/024.html.

Table 13.3 Disney Incomes (2004)

Revenues	
Revenue from media networks	$11,778
Revenue from parks and resorts	$7750
Revenue from studio entertainment	$8713
Revenue from consumer products	$2511
Equity investment income	$372
Total revenues	**$31,124**
Cost and expenses	
Cost and expenses for media network	$9600
Cost and expenses for parks and resorts	$7066
Cost and expenses for studio entertainment	$8038
Cost and expenses for consumer products	$2000
Minority owner interests[a]	$197
Net interest expense	$617
Restructuring and impairment charges	$64
Income taxes	$1197
Total cost and expenses	**$28,779**
Net income (revenues minus expenses)	**$2345**

[a]Payments due to others from the income of subsidiaries that are majority-owned by Disney, but not 100% owned. Disney is required to include their full revenue, and then has to break out the amount owed to the minority owners, such as. to Hearst for its share of ESPN

13.8.3 The Cash Flow Statement

A company's reported earnings uses somewhat arbitrary accounting treatments, such as when to recognize revenues or how fast to depreciate. It is difficult for a potential investor to look beyond those numbers and evaluate the company's true performance. An alternative way to look at a company's health is to go past the reported earnings and analyze instead the cash flow. The *cash flow statement* reports the incoming and outgoing money flow over a time period. This is different from its earnings. As mentioned, it is like a company's checking account because it tracks the inflow and outflow of its funds. It does not include non-cash items such as depreciation, which are less relevant for determining the short-term viability of a company than its ability to pay its bills and debts. Whereas reported earnings can be overstated, a company cannot easily overstate its cash balance. "Cash is a fact, profit is an opinion." This is important for start-up companies with limited liquid assets. These companies are vulnerable to short-term cash shortages, even when accounts receivable suggest long-term financial health.

The importance of cash flow management can be seen from the experience of two film studios that went out of business because they ran out of money. Orion Pictures was a medium-sized respected film studio that produced such hits as *Silence of the Lambs* and *Dances with Wolves* in the late 1980s.[71] Carolco Studio had huge successes with *Total Recall* and *Terminator 2*. However, the worldwide profit from those hits and other films was slow in coming while the movies' budget costs were huge. Both Carolco and Orion went out of business. The cause was poor cash flow management. By the time the substantial profits from these films were made, the companies were already insolvent.

13.8.4 Cost and Expenses

13.8.4.1 When Cost Is Recognized: Expensing Versus Capitalization

One of the key issues in accounting is how to treat a cost item. We have already encountered this issue repeatedly. Should the cost be considered an *investment* in an asset? (This is known as "capitalization".) Or is it a one time *expense*? (This is known as an "expensing.") If the cost is capitalized, it would be proper to distribute the cost of such an investment over its lifetime. This reduces annual expense and raises profit. By identifying the item as an asset rather than an expense, it also raises the asset/debt ratio, which tends to be a good thing for a company to show. In contrast, an expensing means writing off of a cost right away, which lowers profits, but also reduces tax

71 Boxofficemojo. "The Silence of the Lambs." Last accessed July 10, 2017. ▶ http://www.boxofficemojo.com/movies/?id=silenceofthelambs.htm; Boxofficemojo. "Dances with Wolves." Last accessed July 10, 2017. ▶ http://www.boxofficemojo.com/movies/?id=danceswithwolves.htm.

payments due. Within rules and accepted practices, firms have to decide on how to treat their costs, either as investments or as expenses.[72]

In economic and managerial terms, the decision of how to treat the expense should be based on when the benefit from the expense will be realized and for how long. If the benefit of an outlay is reaped entirely in the same period, it should be expensed. But if the outlay is likely to generate benefits in the future, it should be capitalized, and then "amortized" over time.

An example of this problem is AOL, the Internet and outline service provider, which in the 1990s aggressively built up its customer base by sending out free diskettes to attract a subscriber base. The costs that AOL incurred for these diskettes were treated as investment expenditures in generating a subscriber base. Consequently, the expenses were amortized as capital assets. This reduced the early cost of this marketing campaign. Without such treatment AOL would not have shown profits from 1994–1996. The SEC disagreed with this treatment and forced AOL to restate its balance sheet for that period, including expensing the marketing costs, which resulted in the company showing a loss.[73]

In film and other media, production costs are often expensed. Why should this be the case? After all, if production costs are expensed all at once, it would create a big drop to the production company's profit-and-loss statement. Later, as revenues start to flow in, the company shows a radical recovery. This kind of erratic income volatility seems to provide erroneous economic information. And yet the immediate expensing of production costs is quite common around the world. One reason is the tax angle. The immediate expensing of a film creates great potential for tax shelters to investors by creating an big loss for tax purposes. Under the tax codes of many countries, investors are able to write off the film production cost as expenses which allow them to offset their income right away while only receiving taxable revenue from the film later. In the USA, the tax reform of 1986 eliminated this tax shelter. But many other countries have these deals in place to provide an incentive for rich taxpayers to invest in films.

For websites, during their development stage infrastructure outlays are generally capitalized. But once the website is in the operating stage, costs must be expensed. New functionalities and upgrades, however, are capitalized. Practically speaking, it is often hard to differentiate between the two. The cost of initial graphics, which includes the design and layout of each page, is capitalized.[74] The cost for gaining subscriptions is viewed as an expense.

13.9 Managerial Accounting

The standard financial statements that are provided by companies listed on the stock market to the public give only aggregates. In contrast, the company's managers require much more information to operate effectively.[75] A system of "managerial accounting" therefore serves managers in their decision-making, policy setting, and internal communication. It is often also called cost accounting, though that term is generally considered a sub-category, focused on analyzing cost and pricing.[76]

On the most obvious level, every company must generate proper recording of financial and operational information, and internal controls exist to ensure that the data is correct and timely. Controls include procedures for authorizing transactions, and for the recording of separate operations. Typically, financial authorization is separated from the accounts payable department.

Beyond the recording function, managerial accountants must recognize emerging financial problems. For example, if they observe a high debt ratio, then this must lead to a close look at imminent loan repayment dates, cash flow, and late payments from buyers. With such information, management can initiate changes to the expense budget, adjust profit/loss projections, cut costs, and perhaps adjust marketing strategies.[77]

72 McGrahan, Kathleen and Gordon Shillingaw. *Accounting: A Management Approach*. Homewood, Il: Irwin, 1993.

73 Litan, Robert E. and Peter Wallison. "Beyond GAAP." *Regulation* 26, no. 3 (2003): 52.

74 EY. "Internet Accounting Issues: A Summary." May 2001. Last accessed July 6. 2017. ► https://www2.bc.edu/peter-dicarlo/MAY%20Summary%20of%20Internet%20Acctg%20Issues%205-2001.htm.

75 Roehl-Anderson, Janice and Steven Bragg. *The Controller's Function: The Work of the Managerial Accountant*, 3rd ed. Hoboken: John Wiley & Sons, Inc. 2005, 340–365.

76 Webster, William H. *Accounting For Managers*. New York: McGraw-Hill, 2003.

77 Roehl-Anderson, Janice and Steven Bragg. *The Controller's Function: The Work of the Managerial Accountant*, 3rd ed. Hoboken: John Wiley & Sons, Inc. 2005, 93–118.

Large companies with a typically decentralized structure require a strong monitoring of performance across divisions.[78] For such performance evaluation and for control over cost and revenues, a company creates a number of internal financial reporting levels. This is more complicated than it sounds, because there is a lot of intermingling: divisions and sub-units regularly use corporate-level and group-level overhead functions and products.

Another problem is the global spread of company activities. Multinational companies often have divisions and global locations with different accounting practices. They must coordinate to combine in a company-whole system, yet comply with local laws and practices. Local subsidiaries must keep financial accounting systems that follow local regulations as well as company policies. Another dimension of aggregating financial information is across specific customers, often across national boundaries and product lines. To that purpose companies have implemented forms of global account management which has proved to be difficult because it involves data flows from numerous subunits of a company.[79]

13.9.1 Responsibility Center and Profit Centers

To evaluate the performance of a company's division or project it is segregated financially as a "responsibility center." There are three varieties:[80]

- *Expense centers* measure the inputs but not the outputs; for example the legal department. Costs are the inputs and they are measured to determine the efficiency of the department. Managers might compare the numbers with those of operations elsewhere, and look at the trends over time.
- *Investment centers* calculate an operation's profitability by looking at the assets and the profit they achieve. This requires an allocation of common assets to various operations which is often difficult.
- *Profit centers* measure both inputs and outputs. As is the case for investment centers, the revenues include also internal contributions by other departments through the allocation of transfer payments, though the internal "transfer prices" could be arbitrary and affect the results.

13.9.2 Overhead and Indirect Cost

The internal accounting process is complicated by overhead functions that are indivisible and hard to allocate. Examples are interest cost or taxes incurred at the corporate level but attributable to divisional income-producing activities.[81] The allocation of overheads is important in the measuring of the profitability of projects. To allocate cost, a firm separates project-related costs (direct costs) from non-project related costs (indirect costs). Direct cost might include the cost of people and materials specifically used for the project. Indirect cost is the overhead, and includes those not directly associated with projects, taxes, IT, and maintenance beyond the specific project.

For a film production, the fixed cost of the studio that is not directly chargeable to a specific film is considered an overhead, such as taxes, the salaries of management or maintenance staff. The studios estimate a film's overhead by using a percentage of its overall budget.

13.9.3 Transfer Pricing

When goods or services are supplied by one division or profit center to another within the same firm, the price used as "revenue" (to the supplying unit) or "cost" (to the receiving unit) is called a *transfer price*.[82] Examples would be how much the pay-TV channel HBO, owned by Time Warner Media, would pay the Warner Brothers film studio, also owned by TW, for a TV series which it produced. Similarly, how much would one of Bertelsmann's TV channels pay its Random House book publishing division for the rights to make a film script from one of Random House's books?

78 McGrahan, Kathleen and Gordon Shillingaw. "Accounting: A Management Approach." Homewood, Il: Irwin, 1993.

79 Arnold, David, Julian Birkinshaw, and Omar Toulan. "Implementing Global Account Management in Multinational Corporations." *Marketing Science Institute.* 2000. Last accessed July 10, 2017. ► http://www.msi.org/reports/implementing-global-account-management-in-multinational-corporations/.

80 Anthony, Robert N. *Fundamentals of Management Accounting.* Homewood, Il: Richard D. Irwin Inc., 1985.

81 Mellman, Martin, Joseph Kerstein, and Steven B. Lilien. *Accounting for Effective Decision Making*. New York: Irwin, 1995, 298–322

82 Anthony, Robert N. *Fundamentals of Management Accounting.* Homewood, Il: Richard D. Irwin Inc., 1985.

A company's top management must set a policy for transfer prices in varying circumstances. There are several ways to set transfer prices. One is "cost based." Others are "market based," "arms-length," or "regulated" by top management. This is discussed in ► Chap. 11 Pricing of Media and Information.

There can be significant tax consequences to transfer prices, since they can be used to shift profits to low-tax countries. Because of various abuses, the USA has instituted for tax purposes, a "formula apportionment" (FA) method, which makes it harder for a company to manipulate its international tax status. This method requires a company to combine the income of all its subsidiaries into a single taxable income. Income is then apportioned by a formula to the different countries. As a result of this, transfer pricing methods between subsidiaries then cease to be a factor due to taxation.

In addition to using transfer prices to squeeze competitors or to lower taxes, they can also be set up to reward and motivate managers of a division[83] by bonuses based on divisional performance. For this a company must create a fair internal pricing system.[84]

Methods a company can use is to allocate profits to the different subsidiaries proportionally to the revenues generated, to the cost expended, or to the value-added (net of the cost of its contribution).

For example, suppose a company's subsidiary A manufactures a DVD for $6. Subsidiary B obtains it at that cost from A and adds marketing/advertising at a cost of $4. Subsidiary B then sells the DVD to a retailer at a cost of $30.[85]

The total profit on this product is $20. How should the profit be allocated among the two divisions? If the profits were to be allocated proportionally to the cost expended (i.e. 60:40), subsidiary A makes a profit of $12 and subsidiary B makes a profit of $8. But if the proportions of value-added are used, then A gets credited nothing as profit ($6 minus $6), whereas B gets credited with a profit of $20. And if revenues are the base for profit allocations A would receive 1/6 of $36, since its revenue share is 6/(6+30) of overall profits ($20), that is $3.33 while B gets 5/6, that is $16.67.

If transfer prices are too high, they may result in inefficient use of resources. Suppose Company C, a telecom network provider, has created a global network where national subsidiaries were charging each other to use their particular territorial networks. If they were higher than those of third-party service providers, the subsidiaries would buy the services externally. As a result, C's network would be under-utilized.[86]

Leaving the negotiations over transfer price to divisions to haggle over also creates problems. Suppose company D has encouraged all its subsidiaries to negotiate prices between themselves. As a result a lot of management time is spent on internal discussions over pricing. Large subsidiaries, strong personalities, and those with skills of internal politics might be able to get better terms. To avoid this then leads companies to create "objective" pricing formulas. Yet these, too, have problems.

A problem exists when simplistic formulas are used. Suppose Company E has a transfer pricing policy where services sold by one division to another division should be sold at cost, plus a 10% markup. Suppose that its Division 1 sold the service to Division 2, which, after adding items, sold it on to Subsidiary 3, and so on. Each subsidiary added 10% when passing it on. Consequently end prices finish up well above cost plus, which push that division into losses when it tries to compete.

13.9.4 Tracking Costs

A company must be able to track its costs. This enables the company to compare planned ("budgeted") and "actual" costs, and to determine whether corrective action must be taken.[87] The

83 Hyde, C. and C. Choe. "Keeping Two Sets of Books: The Relationship Between Tax and Incentive Transfer Prices". *Journal of Economics and Management Strategy* 14, no.1 (Spring 2005): 165–186.

84 In one survey, 89% of companies reported that they used the same transfer prices for both tax and incentive purposes. However, studies have shown that companies often create two different transfer prices. Hyde, C. and C. Choe. "Keeping Two Sets of Books: The Relationship Between Tax and Incentive Transfer Prices". *Journal of Economics and Management Strategy* 14, no.1 (Spring 2005): 165–186.

85 Feinschreiber, Robert. "Transfer Pricing Methods." Hoboken: John Wiley & Sons, Inc., 2004, 1–61.

86 KPMG. "Transfer Pricing for the Telecommunications Industry." 2006. Last accessed June 20, 2007. ► http://www.kpmg.ca/en/industries/ice/documents/TransferPricingForTelecomIndustry.pdf.

87 Schroeder, Roger G. *Operations Management*. New York: McGraw Hill, 1981, 339.

techniques of cost tracking depend on the nature of a firm's product. Where the product is diverse and discrete, such as a movie, a *job* (project) costing approach is used, in which direct costs such as materials and labor (plus a share of overhead and indirect costs) are attributed to each project.[88] In contrast, firms with repetitive production of uniform goods use a *process* costing in which the total cost is divided by the number of units to obtain a unit cost. An example is a cable TV service.

Standard costing is often used to enable rapid feedback on cost. Costs are estimated ("standard costs") and periodically compared with actual costs. Where there are major discrepancies they are flagged for attention and action. This kind of a system is used for film production.

13.10 Capital Accounting and Budgeting

Capital budgeting is the process of selecting and monitoring capital expenditures.[89] It is the planning process a firm uses to estimate and calculate its long-term, capital investments. Such investments may include asset purchase, infrastructure and plants, R&D projects, advertising campaigns, and other projects that require capital expenditure and whose cash inflows are in the future.

Several interrelated evaluation techniques are used in capital budgeting[90] in order to select projects for investment. They include net present value, internal rate of return, ROI, the hurdle rate, and the payback period.

We discuss these approaches in other chapters, in particular those of ▶ Chap. 4 Technology Management in Media and Information Firms, ▶ Chap. 6 Financing Media, Information, and Communications, and ▶ Chap. 14 Strategy Planning in Media and Information Firms.

88 Wild, Ray. *Production and Operations Management*. Andover, U.K.: Cengage Learning, 1989, 93.

89 Garrison, Sharon. "Capital Budgeting." *Self-Paced Overview*. Last accessed July 10, 2017. ▶ http://www.studyfinance.com/lessons/capbudget/?page=01.

90 Garrison, Sharon. "Capital Budgeting." *Self-Paced Overview*. Last accessed July 10, 2017. ▶ http://www.studyfinance.com/lessons/capbudget/?page=01.

13.11 Information Technology in Accounting

13.11.1 Management Information Systems

Corporate accounting was always at the leading edge of business application of computer technology. This made sense: there are lots and lots of transactions, major number crunching, and fairly well structured procedures. In 1955 the major accounting firm Arthur Anderson computerized the payroll of a client, a GE plant, using a UNIVAC I mainframe computer. Thus started the age of business information systems.[91]

The large accounting firms used large mainframe computers to assist their clients. Soon they discovered that such services and the associated IT consulting were a highly profitable additional service to their auditing clients. As mentioned, after 2003, however, in the face of mounting public and government outcry, they had to divest their consulting business from the public accounting services provided to the same companies.

Initially, accounting software focused on automating routine financial transactions such as the payroll. Soon, it added managerial elements, which became "management information systems" (MIS). This enabled speedy data collection, aggregation, and the distribution of financial information, which led to faster and better informed decisions. A major advance in the application of IT to accounting was the introduction of spreadsheet software.

13.11.2 Enterprise Resource Planning Systems

Enterprise resource planning systems (ERP) are software packages that integrate business functions. Its functions include accounting for financial transactions (including accounts payable, accounts receivable, cash receipts and disbursements, and general ledger functions) and inventory control (including material requirement planning and manufacturing control modules) of the functions it plans.

91 Kee, Robert. "Data Processing Technology and Accounting: A Historical Perspective." *The Accounting Historians Journal* 20, no. 2 (December 1993): 187–216.

ERP integrates the computer functions across a company. Instead of each department having its own software and database, one piece of data (and software) is capable of using a shared data system across many departments.[92]

ERP has been important to the data operations within the firm and was also a step in the standardization of data collection formats across different firms.[93] This started with electronic data interchange (EDI) for the exchange of financial data and documents between the computers of different organizations according to standardized rules. EDI permits exchange of a large volume of data, reducing the paperwork or repetitive inputting of data. It facilitates, for example, export–import transactions that tend to be document-intensive. As mentioned in ► Chap. 11 Pricing of Media and Information, traditional EDI was based on closed networks set up and controlled by large companies with its suppliers and dealers, or by industry groups. It focused on highly repetitive business-to-business transactions. The various EDI systems were incompatible within an industry and across industries. In time, however, integration took place. EDI specifications were set more broadly by industry associations and key companies for their suppliers/dealers. (The main standards are EDIFACT in Europe, and ANSI X.12 in the USA.)

Soon, EDI migrated to the Internet, with low-price EDI software packages available. A further step was the emergence of XBRL (Extensible Business Reporting Language) that is a web-based universal business data reporting system and format that allows users to extract financial information. Its uniform format permits the easy exchange of financial information within company and suppliers, buyers, and so on. This helps small businesses. In 2008, the US securities regulatory agency SEC released rules controlling the use of XBRL by financial institutions.[94] XBRL emerged as the global standard for business and financial data communications.[95]

13.11.2.1 Real-Time Accounting

Traditional paper-based systems could produce reports only on a periodic basis—quarterly or yearly. It was too costly and unwieldy otherwise. Electronic systems could provide more frequent snapshots. Taking a further step gets to "real-time accounting" (RTA), which is now economically feasible and provides up-to-the-minute information along several dimensions. RTA can track and match revenues and costs at the time they were incurred and enable faster monitoring of business activities and performance such as production and inventory. RTA allows management to adapt quickly to opportunities and address problems. However, one must not succumb to hype. Some business processes can be easily monitored in real time but other processes cannot, because they have longer cycles such as big orders and special transactions. Certain cost items are periodic and not in real time.[96] Examples are corporate income taxes.

RTA often displays its information in "dashboards" on computer screens. A dashboard is a visual interface that shows a company's major performance indicators in real time. A dashboard displays present, past, and trend predictions. It presents information in visual and intuitive ways, which helps analytic research and managerial decisions.[97] Its displays include pie-charts, bar-charts, graphs, gauges, and maps. For example, a dashboard may show the effectiveness of different marketing types (e.g. the ROI of a website, direct mail, and discount coupon approaches) and the revenue for different marketing campaigns.

92 Koch, Christopher. "ABC: An Introduction to ERP." *Enterprise Resource Planning Research Center on Cio.* January 10, 2006. Last accessed July 10, 2017. ► https://www.scribd.com/document/41999156/ABC-An-Introduction-to-ERP.

93 Drury, Colin. *Management Accounting for Business*. London: Thomson, 2005.

94 U.S. Securities and Exchange Commission. "Office of Structured Disclosure." Last accessed July 10, 2017. ► http://xbrl.sec.gov/.

95 Willis, Mike. "Corporate Reporting Enters the Information Age." *Regulation Magazine*. (Fall 2003): 56–60.

96 Rezaee, Zabihollah, William Ford and Rick Elam. "Real-Time Auditing Systems." *The Internal Auditor* 57, no. 2 (April 2000).

97 Dundas Data Visualization Inc. "The Dashboard Demystified." 2012. Last accessed June 21, 2012. ► http://www.dundas.com/dashboard/resources/articles/dashboard_demystified.aspx.

13.12 Conclusion

13.12.1 Case Discussion

Disney—Conclusion on Its Accounting Practices

How does our review of Disney's accounting practices add up? Did Disney really do as well financially as management reported? Or did it try to make a beleaguered leadership team look good? Do we find misstatements or major manipulative methodologies that are illegal?

Disney engaged, within industry practices, in accounting practices vis-à-vis its project investors and participants which could confuse an inexperienced author or actor. But in such deals, experience by all partners or their representatives is expected.

Its pro forma statements were trying to paint a more positive picture than GAAP-based financial accounting, by almost $6 billion. This was mostly based on a series of one-time events. Interpreting the pro forma would have been difficult for a normal investor.

Disney handled its auditors PwC correctly by severing its non-auditing earlier than most companies. No major disagreements with PwC have been reported.

Disney has not been subject to an accounting scandal, like many other media firms did not engage in a major write-down of assets in the way that other major media companies such as Time Warner, Viacom, and News Corporation had to. Disney was not directly involved in improper backdating stock options, though its largest shareholder, Steve Jobs, and its acquired company, Pixar, was investigated and their transaction found in violation.

Disney shifted some of its debt off its balance sheet, in particular for theme park subsidiaries, and also for film production projects and broadcasting rights. This debt was not transparent to regular investors but was within the law and industry practices.

Disney publishes an excellent annual "social accounting" report with quantified targets and performance and substantiations.

Legal but in the nature of "accounting to persuade" were the treatments of reserve and amortization of its acquisition of the ABC network the debt of partly owned subsidiaries, and the recapitalization of future earnings.

In conclusion, the accounting figures show Disney performed successfully in financial terms in the period under CEO Eisner, in contrast to its performance in HR management, as detailed in ► Chap. 5 Human Resource Management for Media and Information Firms, Disney's problem was people management, not financial management.

13.12.2 Conclusions on Accounting in Media

In this chapter we covered:

- How media and media tech companies gather and report financial information to partners, investors, and governments;
- How investors and partners need to analyze financial reports;
- How companies use accounting information to run their business;
- The impact of new IT technology on accounting information and on management control over operations.

The monitoring of economic performance for information products has been especially difficult in the past because of unclear cost, uncertain revenues, disconnect of cost/price, and frequent regulation.

Accounting is an amazing tool for measuring the state of a complex organization (with numerous operations, people, supplies, customers). There is nothing like it. It enables companies to develop new models for their organization such as expansion, decentralization of operations, but also centralization of control and real-time control.

Accounting as a "science" is being strengthened as a result of technological tools, as well as by the increased needs for internal control in complex organizations, by the political pressure fueled by recurring scandals, and by the rising demands for information by institutional investors. This raises the role of accounting as a "science".

When RTA information is readily available to managers, can it be denied in the long run to investors? When more information on the financial performance and state of a firm, a division, or a project becomes instantly accessible to managers but is reported only on a highly aggregated basis at long intervals to investors, will such knowledge remain internal? And when information technology is pervading the economy and society,

companies can measure themselves, and will be measured by the outside world, along dimensions that are not only narrowly financial.

Thus, the gap between financial accounting and managerial accounting will narrow, as will the difference between conventional accounting and social accounting. There will be more demands for transparency, and the accounting profession will be its guardians and fiduciaries. To reconcile such transparency with effective management is the challenge for business executives.

13.13 Review Materials

Issues Covered

We have covered in this Chapter the following issues:

- How accounting has developed over the years;
- What function accounting has for companies of different size;
- How the special circumstances of the media and technology sector affect the basics of accounting, and vice versa;
- What the five sets of accounting books are;
- How to define profit;
- How to depress profits by accounting procedures;
- How to apply royalty calculations to books and music;
- How to manage profit participation for limited partnerships;
- How profit participants can protect themselves;
- How to interpret pro forma elements of business results;
- What the role of auditing is;
- How accounting is regulated by the government;
- How to use and read financial documents;
- How to measure a company's ability to pay long-term debts;
- How to use of ratios and metrics to analyze a company;
- How to use non-financial metrics to evaluate company performance;
- How to apply social accounting;
- How to approach valuation of media properties;
- How to read a balance sheet;
- How to evaluate and treat intangibles in accounting;
- How to amortize and depreciate intangible assets;
- How to deal with write-offs;
- How to treat R&D expenditures;
- How to treat stock options;
- What the role of the income and profit statement is;
- How EBITDA and other profit measures are defined;
- How to interpret cash flow statements;
- When to expense and when to capitalize;
- How to apply managerial accounting;
- What the roles and limits of information technology are in accounting;
- How information technology is used in accounting.

Tools Covered

- Balance sheet analysis;
- Income statement analysis;
- Cash flow analysis;
- Liquidity ratios;
- Solvency analysis;
- Royalty calculation and profit participation;
- GAAP and IFRS accounting principles;
- Pro forma statements;
- Investor protection tools and red flags;
- Leverage ratio;
- P/E ratio;
- Operating ratio and operating margin;
- Return on assets;
- Return on investment;
- Rate-of-return methodology;
- Operating ratio and operating margin;
- Social accounting;
- Stock options;
- Valuation of assets;
- Valuation of intangibles;
- Capitalization vs expensing;
- Write-offs and write-downs;
- Depreciation and amortization;
- Depressing of accounting profits;
- Profit accounting;
- Profit and loss statement;
- EBITDA;
- Responsibility and profit centers;

- Overhead allocations;
- Transfer pricing;
- Cost tracking;
- Capital accounting and budgeting;
- MIS, ERP, RTA, XBRL.

13.13.1 Questions for Discussion

1. How can one value a cable television company?
2. Artists and film studios often argue about profit participation. What are the main accounting issues at stake? What are alternative solutions?
3. XYZ, a TV network, has produced a hit TV show, *My Brother and I* that it wants to put into syndication. How can the network account for this show?
4. Discuss the pros and cons for using EBITDA to value a film company.
5. Describe the coordinating stage of a media company's capital budgeting process.
6. If the tax authority IRS were to end its practice of not charging tax on earnings for which tax has already been paid in other countries, but instead treated such tax as a business expense, what would the effect on media companies be?
7. If it is known that a very high percentage of a company's assets are intangible, what would be the best approach to valuing the company?
8. Explain why some companies, like Disney, have a high *P/E* ratio.
9. Discuss the ways media and technology companies differ from other industries in how they amortize their major assets.
10. How would a General Partner in a limited partnership go about depressing its earnings to decrease profit payout? What can the limited partners or profit participants do to protect their interests?

13.13.2 Quiz

1. What is Extensible Business Reporting Language (XBRL)?
   A. Web-based format that allows users to extract financial information easily;
   B. Computer language companies use to report errors;
   C. Specialized modification of JAVA;
   D. Language used by FASB while they audit companies.
2. How do a company's employee stock options affect a worker's productivity?
   A. It decreases productivity;
   B. It increases productivity;
   C. It increases and decreases productivity;
   D. It does not affect productivity.
3. Why do net profit participants of films often not receive any royalties?
   A. Studios spend all profits paying for failed movies;
   B. Gross profit participants push up the break even point;
   C. Few movies generate profit in general.
4. Which responsibility center is best for decentralizing the organization?
   A. Expense center;
   B. Profit center;
   C. Investment center;
   D. All of the above.

5. What is a pro forma?
   A. A company's statement of cash reserves and credit;
   B. A company's statement of profits and losses;
   C. A company's balance sheet;
   D. A modified balance sheet intended to highlight the positive developments that the company has made in the past quarter;
   E. A modified balance sheet intended to portray the company's real condition by excluding unusual and non-recurring transactions.

6. Intangible assets include:
   A. The firm's reputation;
   B. A firm's borrowing capacity;
   C. Depreciated capital assets;
   D. Manufacturing facilities.

7. The difference between a company's book value and market value is:
   A. Debt;
   B. Long-term assets;
   C. Goodwill;
   D. Shareholders' equity.

8. Some features of enterprise resource planning (ERP) include:
   A. Materials management;
   B. Sales and distribution;
   C. Production planning;
   D. All of the above.

9. Which of these would not be included in a market based evaluation of intangible assets?
   A. An active public market;
   B. Arms-length transactions;
   C. An exchange of comparable products;
   D. The market index of all assets within the industry.

10. Which of these would not be included in a media company's capital budgeting process?
    A. Monitoring reports of the company's current financial health;
    B. Preparing reports for investors of the company's cash flows;
    C. Coordinating inter-departmental budgeting;
    D. Evaluating the viability of a new network infrastructure.

11. What is/are the special aspects of media accounting?
    A. Huge capital investments and depreciation;
    B. Rapid obsolescence and price decline of assets;
    C. Highly regulated;
    D. All of the above;

12. It is not always advantageous to employ real-time accounting because:
    A. It becomes harder to monitor business activities;
    B. It is economically unfeasible to maintain;
    C. Certain processes have longer cycles;
    D. It does not give investors sufficient warning.

13. Disney is considering making a new Hannah Montana CD. Disney determines that the fixed cost to produce the CDs is $400,000 and that it can produce the CDs for $2. It also concludes that a reasonable price for the CD is $10 each. How many CDs must Disney sell in order to break even?
    A. 10,000;
    B. 50,000;
    C. 15,000;
    D. 100,000;
    E. Disney cannot break even with this venture.

14. What is the purpose of managerial accounting?
    A. Provide information for decision makers outside of the company.
    B. Provide information for internal management.
    C. Calculate a firm's tax liability.
    D. Distribution of profits.

15. What of the following is not a measure of media companies to understate profits?
    A. Exclusion of revenue streams.
    B. Allocate high costs to overhead expenses.
    C. Set a low percentage for depreciation.
    D. Charge high internal transfer prices.

16. Which term is not usually used to express "profit"?
    A. Income.
    B. ROI earnings.
    C. Margin.
    D. All of the above.

17. How are assets typically valued?
    A. Acquisition cost.
    B. Appraisal.
    C. Fair market value.
    D. Comparative pricing with similar assets.

18. What is a type of responsibility center that aims to calculate an operation's profitability based on inputs?
    A. Expense center.
    B. Investment center.
    C. Profit center.
    D. Revenue center.

19. Which ratio is used to measure a company's ability to pay current liabilities with current assets?
    A. Debt to Equity Ratio.
    B. Current Ratio.
    C. P/E Ratio.
    D. Operating Ratio.

20. How can profit participants protect themselves from being undercompensated?
    A. Make sure that all contract terms are clearly defined.
    B. Conduct sufficient due diligence on the counterparty.
    C. Obtain all promises in writing and in contracts.
    D. All of the above.
    E. A and C only.

Quiz Answers

1. D
2. D
3. B
4. D
5. E
6. A
7. D
8. C
9. D
10. B
11. C
12. C
13. B
14. B
15. C
16. D
17. A
18. A
19. B
20. D